

Vol. XII. No. 6. WEEKLY.

BALTIMORE, SEPTEMBER 17, 1887.

88.00 A YEAR. SINGLE COPIES, 10 CHIT

IILL and ENGINEERS'

EUREKA PACKING

IAS. SMITH & CO. MANUFACTURERS

Steam, Hydraulic and Locomotive Packing,

Works, 413 to 421 Race St., Cor. of Crewn.

Office & Store, 137 Market St., Philadelphia.



ling Outfits for Flour an

WE MAKE ROLLS AND PORTABLE MILLS COMPLETE.

Manufactory Established in 1851.

NORDYKE & MARMON CO., INDIANAPOLIS, INI

MORSE ELEVATOR WORKS

Pers and Builders of HYDRAULIC STRAM.
Hand-Power, PASSENGER and FREIGHT!
Hand-Power, PASSENGER and FREIGHT!
Office: 411 CHERRY STREET,
Works: FRANKFORD AVE., WILDEY & SHACKANAXON S

Branch Office, 108 Liberty Street, NEW

NOTICE TO Contractors,

AND OTHERS INTERESTED IN

Tunneling, Shaft-Sinking, Etc.

Engineers' Tables of Progress

INGERSOLL ROCK DRILL CO., 10 Park Place, New York.



LIDGERWOOD CO.,"

96 LIBERTY STREET, NEW YORK.



Engines, Shapers, Gear Cutters, &c.



EST, STRONGEST, BEST BALANCED and CHEAPEST in the WORLD.

Shafting, Hangers, Couplings, &c.

MEDART PATENT PULLEY CO., Storm: 90 to 10t W. Second St., Clacionati.

FRANK W. SWETT, MANUFACTURER OF BAND SAWS.

THE · ALTERNATING · SYSTEM.

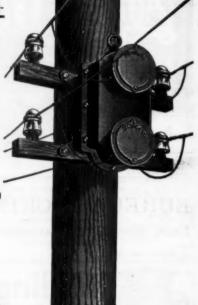


Incandescent Electric Lighting from Central Stations
made Universal, Economical and Profitable, irrespective of
distance.

Westinghouse Electric Co.

Eastern Office:

17 Cortlandt St., New York.



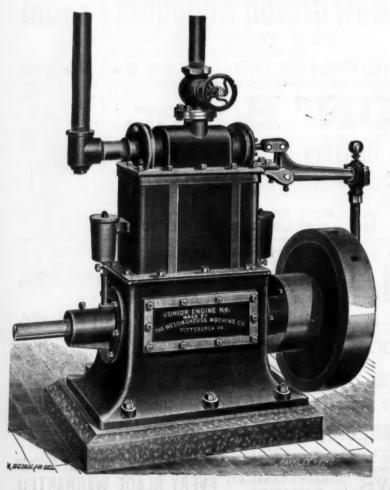
The Westinghouse Automatic Engine.

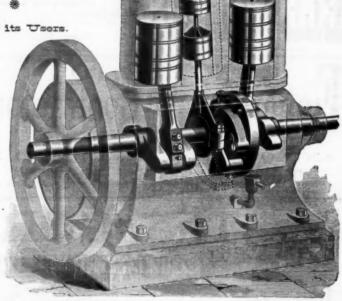
• PRICES REDUCED. •

Condemned by its Competitors and Endorsed by its Users

->THE "JUNIOR" AUTOMATIC ENGINE,

15, 25 and 35 Horse-Power Only.





The Lowest-Priced Engine in the Market.

- WELL BUILT AND SERVICEABLE. -

#Westinghouse Machine Co.

PITTSBURGH, PA.

Sales Department for the United States Conducted by:

WESTINGHOUSE, CHURCH, KERR & CO.,

17 Cortlandt St., N. Y. Hamilton Building, Pittsburgh, Pa.

FAIRBANKS, MORSE & CO.,

FAIRBANKS & CO.,

PARKE & LACY,

UTAH & MONTANA MACHINERY CO.,

D. A. TOMPKINS & CO.,

IRON BAY MANUFACTURING CO.,

Marquette, Mich.

Rubber Belting was same METALLE B



VULCANITE

Saw Gummer DOES NOT CASE HARDEN.

DURABLE.



Steam and Water Hose.

BLE" HORE, Circular, Woven, Seamless, Antisep and Hand Fire Engines, Force Pumps, Mills, Faster

New York Belting and Packing Co.

Sole Mfrs., 15 PARK ROW, NEW YORK.



BOILER and PIPE COVERINGS.



ABSOLUTELY

FIRE PROOF.

MINERS and MANUFACTURERS, BRAIDED PACKING, MILL BOA SHEATHING and SPECIALTIES.

CHALMERS-SPENCE CO., 419-425 Eighth Street, New York.

WILLIAM TAYLOR & SONS.

COLUMBIAN IRON WORKS.

23 to 39 Adams Street, BROOKLYN, N. Y.

Oil Works Machinery,

HYDROSTATIC PRESSES and GENERAL MACHINERY, Engines, Boilers, Castings, and Machine Making.



For Stamp Mills.



M. T. Davidson Steam Pump.

Simple, EFFICIENT, Reliable,

URPOSES

SACO WATER-POWER MACHINE SH

BIDDEFORD, MAINE,

COTTON * MACHINERY

OF THE MOST IMPROVED PATTERNS.

Cylinders, 36x36 and 36x30, with 20 tops and Self-Strippers and Railway Troughs. Union Cards, with workers, strippers and tops.

FINISHER RAILWAY HEADS.

DRAWING FRAMES, ANY LENGTH, WITH 3, 4 AND 5 LINES OF STEEL ROLLERS. English Slubbers and Fly Frames, With Long or Short Bolsters.

BOBBINS=12x6, 11x5\, 10x5, 9x4\, 8x4, 7x3\, 6x3, and 5x2\.

RING SPINNING FRAMES, 2, 13, 18 AND 15 INCH RINGS.

-TWISTERS.

MULES, Parr, Sharp and Roberts' and Higgins' Pattern, SELF-ACTING

14, 1 5-16, and 11-inch Gauge.

S. W. RICHARDSON, Treasurer,

No. 1 Simmons Building, Boston

JAS. H. McMULLAN. Agent.

Biddeford, Maine.

SOLID CAST STEEL

+SC00PS,*

AND COAL SHOVELS

Cleveland, Ohio.

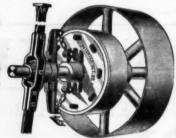
These goods are the acknowledged standard wherever there is hard work to be done, and are recommended for RAILROAD, MINING, FURNACE and CONTRACTORS' USE IN GENERAL.



Kaestner Patent Friction Clutches

A Perfect Friction Clutch.

SIMPLE and DURABLE



Sole Builders.



MACHINISTS and FOUNDERS

And Builders of General and Special Machinery,

303 to 311 S. Canal St.

CHICAGO, ILL.

TO READERS OF ADVERTISEMENTS, Fine Varnishes, Artists' Materials.

Readers of the MANUFACTURERS' RECORD who order any goods herein advertised, or ask for information concerning them, will oblige the publishers by stating that they saw the announcement in the columns of this paper.

m. Chisholm & Sons Chickasaw Iron Works.

JOHN E. RANDLE & CO.

98 SECOND STREET, MEMPHIS, TENN.

COTTON

Manufacturers and Dealers in -

GENERAL

Plantation ⇒ **™** Machinery

* AJAX *

and Brooks Cotton Presses

GENERAL AGENTS FOR Atlas Engines and Boilers, Saw Mills, Corn Mills,

THE BLAKE STEAM PUMPS. THE BROWN COTTON GINS, AND THE GARDNER GOVERNOR CO.

A Full Line of Shafting.

The Medart Wrought Rim Pullevs.

Steam Pipe, Brass Goods Machinery Supplies.

Write for Catalogue and rices, and mention MAN-PACTURERS' RECORD.

DEVOE & CO.

OFFICES: Fulton Street, Corner William,

NEW YORK.

MIXED PAINTS.

If you think of doing any painting this spring, we wish to call your attention to the fact that we guarantee our ready-mixed paints to be made only of pure linseed oil, and the most permanent pigments. They are not "Chemical," 'Rubber," "Patent," or "Fire-Proof."

We use no secret or patent method immanufacturing them, by which benzine and water are made to serve the purpose of pure linseed oil.



of Fifty Desirable Shades for consumers

ROOF

PAINTERS' SUPPLIES OF ALL KINDS.

→ Mathematical Instruments and Engineers' Goods. ←

Catalogues of our different departments to responsible

Cor. Fulton and William Sts. | COFFIN, DEVOE & CO. NEW YORK. 176 Randolph Street,

CHICAGO.

B. W. PAYNE & SO

Box 1018, ELMIRA, N. Y.

107 Liberty St . N.Y.

so S. Canal St., Chicago.





Vertical, Stationary and Portable

ENGINES<u>™</u>BOII

e make the best and most reliable high-speed Automatic Engines for running Electric Plants. We guarantee the "Payne Automatic" to furnish same power as the ordinary ting Engine at one-third to one-half less fuel and water, doing the same work. It will pay send for our catalogue and prices before ordering elsewhere. We have got what you



REGULATION

Automatic Cut-Off

ENGINES

Chandler & Taylor's STEAM ENGIN



Are Strong, Well-Built and Serviceable
Are designed for Heavy and Continuou
Work.
May be run at High Speed when desired,
performing the duties of High GradEngines,
And are sold at the prices of ordinary
Engines.

For Prices and Descriptive Circulars, address

CHANDLER & TAYLOR INDIANAPOLIS, IND.

CONSOLIDATED ELECTRIC LIGHT COMPANY.

OWNERS

OF THE

SAWYER-MAN PATENTS.



ORNERAL OFFICES: Mutual Life Building, au St., N. Y. City.

BALTIMORE OFFICE: No. 217 E. Fayette St.

PHILADELPHIA OFFICE: No. 205 Walnut Place.

BOSTON OFFICE: No. 33 Federal Street.

The DYNAMO of this Company is AUTOMATIC in its regulation, and will maintain a UNIFORM LIGHT, with ALL or ANY PORTION of the lights in Circuit. Our LAMP will not BLACKEN and will MAINTAIN its CANDLE POWER during its Guaranteed life.

Plans and Estimates Purplehed for all Minds of Incandescent Lighting. ESTIMATES FURNISHED FOR THE THOMSON-HOUSTON SYSTEM OF ARC LIGHTING.

CLEVELAND FLUE-CLEANER MANUFACTURING CO.



46 Power Blook CLEVELAND OHIO.

FOR THE LOWEST-PRICED FIRST-CLASS



Special stock river 5 to 50 H. P., both Sta-

CORRESPONDENCE SOLICITED.

Mantion this Paper

SKINNER ENGINE CO. Erie, Pa.

Awarded THREE GOLD MEDALS by the World's Industrial and Cotton Centennial Exposition of New Orleans, La.



More than 2000 in Use.

Manufacturers of Portable and Stationary Engines and Boilers, including the well known Skinner Portable return flue boiler. Send for ILLUSTRATED CATALOGUE AND PRICE

WORKS. HAMILTON



TOD & CO.

YOUNGSTOWN, OHIO,

50 to 500 Horse-Power. Modern design. Plain, Strong, EFFECTIVE, ECONOMICAL COSTS LESS THAN ANY OTHER FIRST-CLASS ENGINE. Send for Photograph.

BLAST FURNACE ENGINES ON HAND.

ALSO A STOCK OF OTHER, ENGINES (our make.)

Prices and description on application

McIntosh, Sevmour & Co., Auburn, N. Y.



Automatic Cut-off Engines

Close Regulation,
Close Regulation,
Close Regulation,
Creat Burability and Simplicity,
Perfect Workmanship and Design.
Unrivaled in these qualities, our angines are suitable for all purposes, especially where high speed and
difficult service are required, as in electric-light plants,
rolling mills, etc. Send for Illustrated Catalogue.
Young & Thomas, 4s Cortlandt St., New York City,
Harian Page, 143 & 145 N., 3d St., Philadelphia, Pa.
Geo. A. Smith, 1419 Main St., Richmond, Va.

WM.B. POLLOCK & CO

MAHONING BOILER WORKS PIPES STACKS BEAMS ROOF TRUSSE BLAST FURNACES & ROLLING MILL WORK

JARVIS PATENT FURNACE



FOR SETTING STEAM BOILERS

Roonomy of Fuel, with increased capes ower. Like the Siemens Freeens sheel, it utilizes the waste gases with hot he firs. Will burn all kinds of waste fu-inst, including Slack Coal, Sawdust, Log c. Send for Circulars.

Jarvis Engineering Co.,
A. F. UPTON, Treas. and Ger'i Manager,
el Otiver St., Boston, Hass.

Graniteville Mfg. Co., Graniteville, S. C., Charleston Bagring Co., Charleston, S. G. P. H. Mayo & Bross, Richmond, Va. Phosphate Mining Co., Beaufort, S. C. Brush Swan Ricctric Light Co., Rorfolk, Columbus Ioe & Rofnigerator Co., Coli

nee Mill, Granitoville, S. C.



The VICTOR TURBINE

WITH PROPORTIONATELY HIGH EFFICIENCY AT PART-GATE.

Such results, together with its nicely-working gate, and simple, strong and durable construction, should favorably recommend it to the attention of ALL discriminating purchasers. These wheels are of very Superior Workmanship and Finish, and of the Best Material. We also continue to manufacture and sell at very low prices the

-ECLIPSE DOUBLE TURBINE,-

So long and favorably known. State your requirements, and send for Catalogue to the

STILWELL & BIERCE MFG. COMPANY

DAYTON, OHIO, U.S. A.

ENGINES

FOR SALE

Six 91/2 x 121/2 Automatic.

Two 91/2 x 121/2 Plain Slide Valve.

Six 61/2 x 81/2 Automatic; also,

One 8 x 9 Vertical, second hand.

One 8 x 10 Vertical, second hand.

One 6 horse-power Baxter.

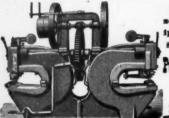
One 6 horse-power Taylor Portable.

Address,

Progress Engine & Machine Works,

SUMMERFIELD, BALTIMORE CO., MD.

THE LONG & ALLSTATTER CO. HAMILTON,



Double, Single, Angle-Bar, Gang, Horisontal, Twin, Boiler, Spacing, Gate, Multiple, BELT and

Punches and Shears,

Over 300 sizes.

Power Oushioned

avy Double Machine. Send for N



Heavy Single Machine.

Laundry Machinery

Largest Stock. Latest Improvements. Fullest Line.



Washing Machines,
Ironing Machines,
Centrifugal Machines,
Mangles, Wringers, etc.
BOILERS AND ENGINES.
——OUTPENS FOR——

Hotels and Public Institutions

The A. M. DOLPH CO.

295 Wabash Avenue, CHICAGO, ILL. Cor. 9th St. and Freeman Ave, CINCINNATI, 0.

THE MANUFACTURERS' RECORD

IS THE FOREMOST EXPONENT OF THE INDUSTRIAL INTERESTS OF THE SOUTH.

High-Speed Traveling Cranes.

E are now prepared to build HIGH-SPEED POWER TRAVELING CRANES
for any capacity of load, any length of runway and any width of span, with one
or two trolleys on the bridge. These trolleys to work either slow or fast, together
or independently, in like or in opposite directions, horizontally or vertically,
while the bridge can be traversing slow or fast at the same time in either direction. The
speeds of bridge on runway are 160 feet and 200 feet per minute; the speeds of trolleys on bridge are 56 feet and 100 feet per minute, and there are four boisting speeds of
5, 10, 20 and 40 feet per minute; all can be varied quickly, without the least shock or
jar, from zero to maximum or to any intermediate speed. The load is always automatically sustained, thus avoiding absolutely the great danger and anxiety
which are inseparable from the use of those Cranes which require the
operator to apply the brake. We have had one of these Cranes of 25 tons capacity in
onstant use in our foundry for nearly two years, and we offer them with full confidence for
the greatest range of service. We invite the correspondence of parties interested in the
subject.

WM. SELLERS & CO. Incorporated, Philadelphia, Pa.



WARFIELD MFG. Co.

336, 338, 340, 342 North Street, BALTIMORE MD.

Manufacturers of SPECIAL MACHINERY,

Steam Engines, Shafting, Hangers, Pulleys, Couplings, Etc., Etc.

Warfield's Green Corn Cutter,

Bole Manufacturers of For Cutting Green Corn from the Cob or Canning.

Will Holl & VII Goll Ull II Ull Holl Goll For Cutting Green Corn from the Cob or Cannin The Most Complete Line of Patented Machinery for Fruit, Vegetal and Oyster Packers' use in the United States, and the Largest Manufactures of the same.

Build Repair Your Machinery



Engine Lathes, Planers, Chucking Lathes, Hand Lathes,

MACHINE TOOLS GENERALLY

LATHE&MORSETOOLCO.

Worcester, Mass., U. S. A.

South Pittsburg Pipe Works.

R. Downing, Prest. James Bownon, Vice-Pres

DR. W. R. TOWNSEND, Secy.

CAST IRON GAS&WATER PIPE

South Pittsburg, Tonn.

WARREN WOOD & CO.

115 Broadway, N. Y.

EASTERN AGENTS.

CHATTANOOGA FOUNDRY & PIPE WORKS.

DAVID GILES, Prest. C. B. IBESTER, Vice-Prest. M. LLEWELLYN, Secy. and Tress. Successors to B. GILES & CO., Chattaneogs, Tenn., Haunfacturers of



Also Castings and Patterns of Every Description made to order, Portable Grinding Mills

French Buhr Stones ESOPAS STONES.

MILL STONES.

MILL MACHINERY.

ENGINES, BOILERS, &c

Fall Flouring Mill Outfits.

Send or Catalogue. Address

MUNSON BROS.

BOX 905.

UTICA, N.Y.



R. SWORMSTEDT & CO.

COLUMBUS COLLER CHAIN BELTING

sold at Manufacturers' Price, and fully guaranteed as rep-

Office and Shops, 603 N. Calvert St.

BALTIMORE



Baltimore Mill Furnishing Works,

Mill Stones, Portable Mills, Pulleys, Shafting, and Mill Gearing.

Import Bolting Cloths, and General Mill Furnishers. B. F. STARR & CO.



AMERICAI

It is a broad assertion, and we mean just what it implies, and nothing short of it. It will make better meal, grind faster, hold the dress longer, and in overy way the best proportioned and best looking mill on the market.

HILLSTONES for all purposes, and at prices that fully meet sharpest competition.

FLOUR MILLS—Portable and Stationary outfits com-

The Simplest WATER WHEEL on the market.
The Simplest WATER WHEEL on the market.
The Most Perfect SAW MILL, Simple, and prounced by all The Best.
SHAPTING and GEARING of All Kinds.
Be sure to send for Circulars and Prices before buying.

A. A. De LOACH & BRO. Founders and Machinists.

ATLANTA, CA.

MANUFACTURERS' RECORD Co., Publishers.

HOOPES & TOWNSEND.

MANUFACTURERS



KEYSTONE BOILER RIVETS.

Cold Punched, Chamfered, Trimmed and Drilled Square and Hexagon Nuts.

Finished and Case-Hardened Steel Hexagon Nuts.

BRIDGE RODS and RIVETS.

uilders' IRON Work. TANK and COOPERS' RIVETS.

PHILADELPHIA, PA.

The STANDARD STEEL

Locomotive and Car Wheel WANDARDE

OTIS STEEL

Office, 220 S. Fourth Street,

Representatives

cars, Room s4, Aster H s, New York City. 10HI MAINERST & 60., Church & R. tor Streets, New York City, N. tor Streets, New Yor BORTON, REED & CO., Bu

Street, Louisville, Ky.

GBO. EIBET & 60., 203 Central
Ave., Clacinasti, O.
ARDREW WARRE, 207 N. ed St.,
St. Louis, Mo.

St. Louis, Mo.

8. BREWER, 156 Lake St., Ch.
L. LEAGH, 30 Oliver St., B.
Mars.

STEEL RAILS

PENNSYLVANIA

Standard Sections **Light Sections** Street Rails

Fish Plates. Frogs, Switches

STEPHEN W. BALDWIN SALES AGENT

STEEL COMPANY

50 to 80 lbs. per yard 16 , 45 ** Bolts & Nuts, and Crossings.

NO.2 WALL STREET NEW YORK N.Y.

16 lbs. Full Size.

CLEVELAND WHEEL AND FOUNDRY WORKS

BRAYTON, Proprietors.

MANUFACTURERS OF-

Car, Engine, Truck and Tender Wheels, Machinery, Railroad and Rolling Castings. Also, CHILLED IRON RAILROAD FROGS, (Any Angle),

AND STREET RAILROAD TURNOUTS.

Office, No. 20 Carter St., - CLEVELAND, O.

Vehicle Spring Co., MANUYAG- PAT. WAGON SPRINGS & WAGON SEAT SPRINGS, CHATTAHOOGA, TENH.

Wagon Seat Spring.

VEHICLE SPRING CO., Chattanooga, Tenn

ESTABLISHED 1852.

. "STILL AHEAD AND BOUND TO WIN."

The James Ohlen & Sons Saw Manufacturing Co.

Standard, Solid and Inserted Tooth Saws, Mill, Muley, Gang, Drag, Cross-Cut and Band Saws.

JAMES OHLEN & SONS COLUMBUS. OHIO

COLUMBUS, OHIO.

...... WHAT PEOPLE SAY:

"I am running one of your Chisel-Tooth Saws. Have been working in saw mills for past twe years, but never found a saw equal to yours. Please send me a catalogue. W.A. Williams. Wite & Nelson, Jonesbore, Ind., Feb. 1, 1887, write: "The 64-in. gauge solid saw is loing splendid work: inclosed find draft for same. Make and ship us 12 gauge, same hand as ther, soon as possible.

B.R. Edmards, Jacksonville, Fla., writes: "Saw received. Has been running steadily md not made one had line. Draft inclosed.

and not made one had line. Draft inclosed.

* The Above Cuts Show Our Champion Chisel-Tooth Saw.

It has been thoroughly tested on steam and friction feed, in all kinds of timber, and we guarantee to our patrons perfect satisfaction in every respect. Each set of teeth will cut from roo, not to 29,000 feet. We advertise only practical possibilities, and stand by what we say, and guarantee that any saws bearing our trade mark (James Ohlen & Sons) are equal, if not superior, to any others in every respect, and will give satisfaction to those using them.

Write for Catalogue and mention this paper.



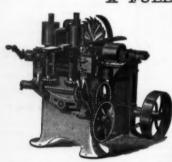


FRANK & CO.

Planing, Matching, Moulding, Tenoning, Mortising Boring, Shaping Carvins, Etc



176 Terrace St., Buffalo, N.Y.



Wood-Working Machinery,

SOUTHERN TRADE.

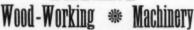
SPECIAL DESIGNS IN

Re-saws, Planing Machines, Jointers, Band-Saws, Etc.

Send for Catalogue and Prices before pure

SNIGGS & CO., - - Buffalo, N. Y.

PATENT



Of the Latest and most Improved Designs for

Planing Mills, Furniture Factories, Chair Factories, Car and Agricultural Works, Carriage and Buggy Shops and

GENERAL WOOD WORKERS,



(Successors to the Cordesman & Egan Co.) 228 to 240 W. Front St. Cincinnati O., U. S. A. Thos. P. Egan, Pres. Ed. Ruthven, Sec. F. Danner, Sup.

Barnes' Water Emery Tool Grinder.



UPRIGHT DRILLS, Has no Pumps.

Lathe, 15 inch swing, 6 foot or 8 foot bed.

It is as easily managed as a grindstone, and will give vastly better results. It will be sold subject to approval. These machines are made a specialty in our factory.

They have advantages not found in other machines in this line.

It will pay parties desiring to purch end for full description and prices to

W. F. & JOHN BARNES' CO., No.221 Ruby St., Rockford, III.

No Valves.

No piping to supply it with water.

It has nothing to get out of order; is always ready for use.



TOLAND & SON, Front & Low Streets, Baltimore

CORDESMAN, MEYER&CO.



171 and 173 West Second Street, CINCINNATI, OHIO.

Wood Working Machinery

OF EVERY DESCRIPTION.

Planing Mills, Furniture and Chair Fa Carriage, Wagon and Agricultural Works.

Write for our latest Catalogue and Price List. Corresp ence solicited.



B. HOLM BUFFALO, N.





ozing Machines, Stave Dressers, Stave Jointers, Hoop Drivers ding Jointers, Heading Dressers, Beer Stave Benders, s. Leveling and Trussing Machines, Cylinder Stave Saws, Heading Saws, etc.

STAVE, BARREL, KEG AND HOGSHEAD MACHINERY.

STEARNS MNFG. CO., ERLE, PA

Capacity 15,000 to CIRCULAR SAW MILLS planned and furnished. ENGINES, 15 to 800 BOILERS OF IRON OR STEEL

BAND SAW MILLS, with Friction or Steam Feed.

STEARNS' Fractional Head Blocks, Edgers, Cut-Off Saws, Trimmers.

The Wilkin Pony Gang. No foundation. Capacity 30,000 to 40,000 feet of Flooring per day. The Wilkin Heavy Gang Saw Mill for large mills. Lath and Picket Mills. Bolters. Conveyors. &c.



Sinker, Davis & Co.

INDIANAPOLIS, IND.

Automatic Engines. IRON AND STEEL

BOILERS.-->

BAND SAW LOG MILLS



SPECIALTY .

ALL SIZES

Patent Quick Return

LATEST IMPROVEMENTS.

Bickford Drill Co.

Cor. Front and Pike Streets.

CINCINNATI, O.



HOWARD & BULLOUGH'S

JAK.

OPENERS, LAPPERS, REVOLVING FLAT CARDS, ELECTRIC STOP MOTION DRAWING FRAMES, SLUBBING, INTERMEDIATE,

BOVING AND FINE JACKS, (NEW PATTERNS 1886) ALL MADE BY TOOL WORK; EVERY PART EITHER

TURNED, MILLED OR PLANED, AND CONTAINING MANY PATENTED AND VALUABLE

IMPROVEMENTS. WARPERS, COPPER CYLINDER SLASHERS, (New Models.)

SOLE IMPORTERS,



RILEY & GRAY, - - BOSTON, MASS.

CARD CLOTHING, WOOLEN AND WORSTED MACHINERY, Etc., Etc.,

Whitin Machine Works

J. LASSELL, President and Treasurer

G. E. TAFT. Agent.

H. ELLIS, Superintendent.

ABSKLL, President and Treasurer G.

MANUFACTURERS OF

COTTON MACHINERY

Openers, Lappers, Cards, Railway Heads, Drawing, Ring Spinning,

SPOOLERS, WET and DRY TWISTERS, REELS,

WARPERS, DRESSERS, LOOMS, &c.,-

Whitinsville, Worcester County, MASS.

Queen City Printing Ink Co.

CINCINNATI, OHIO.

THE INK QUEEN CITY PRINTING INK CO.

MANUFACTURERS OF ALL DESCRIPTIONS OF

INKS!

≪ Varnishes and Sizes**≫**

FOR PRINTERS' USE.

New York Office, · · · 194 William Street.

Philadelphia Ofice, - 434 Walnut Street.

SAVE FUEL.

Are you putting cold water into your boiler?

You can heat it boiling hot with the exhaust steam out of your engine.

You would save TWENTY-FIVE PER CENT. of the fuel required to do the same work without a

Feed Water Heater. *
Send for our catalogue on this subject.



D. A. TOMPKINS CO. Charlotte, N. C.



— the wainwright— Exhaust Feed-Water Heater

CORRUGATED TUBING.

-WHICH-

Absorbs All Expansion and Contraction,

And automatically frees itself from "scale," gaining in circugila and heating surface over the ordinary tabe,

THE WAINWRIGHT MFG. CO

65 & 67 OLIVER ST., BOSTON, MASS.

Y YORK-F. B. Aspinwall, Manager, 93 Liberty Str. LADELPHIA-Fairbanks & Co., 701 Arch Street.

The DEANE STEAM PUMP CO.

-- HOLYOKE, MASS .--

BUILD

STEAM * PUMPING * MACHINERY

OF EVERY VARIETY.

Send for New Catalogue No. 22



The DEANE STEAM PUMP CO.

NEW YORK, BOSTON,

PHILADELPHIA, ST. LOUIS,

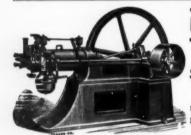
MAKE A SPECIALTY O

Water

CHIGAGO.

Works ENGINES

FOR THE SUPPLY OF CITIES AND TOWNS.



Over 18,000 in Use. Otto Gas Engine

Working Without Boiler, Steam, Coal, Ashes or Attendance.

Started instantly by a Match, it gives full power immediately. When stopped, all expense ceases.

Guaranteed to Consume 25 to 75 Per Cent. less Gas than any other Gas Engine Boing the same Work.

No explosions, no fires nor cinders, no gauges, no pumps, no engineer or other attendant while running. Recommended by insurance companies.

UNSURPASSED IN EVERY RESPECT for hoisting in warehouses, printing, ventilating, running small shops, &c. Sizes: 1 to 25-Horse power.

Branch Omce, 130 Wash. OTTO GAS ENGINE WORKS, Schleicher, Schumm & Co. 33d & WALNUT STS.,

Since the Invention of the Sawyer Spindle, the most Popular Spindle has broved to be The Best Spindle.

IS YOUR
WITH THE
WITH THE

Best Spindles?

NUMBER 49 RABBETH SPINDLE
Is undoubtedly the most economical and Satisfactory Spindle in the market for all ordinary numbers of yarns if you have not seen it Running, send for a Sample.

Is undoubtedly the most economica and Satisfactory Spindle in the market for all ordinary numbers of yarn if you have not seen if you have not seen if you have not seen if you have not sample.

GEO, DRAPER & SONS HOPEDALE, MASS.



The 'SERCEANT' ROCK DRILL

Is More Simple in Construction, More Effective in Operation, and

REQUIRES LESS REPAIR

THAN THE BEST-KNOWN ROCK DRILLS IN THE MARKET.

We are Prepared to Prove the Above Statement,

AGENTS FOR THE NORWALK AIR COMPRESSOR.

Correspondence Solicited and Estimates Furnished for all Kinds of MACHINERY Required in MINING, QUARRY ING or CONTRACT WORK

Sergeant Drill Co., 16 Dey St., New York.

The York Ice and Refrigerating Machines York Mfg. Co.

ALEXANDER BROWN & SONS, ESTABLISHED | BALTIMORE. Transact a General Foreign and Domestic Banking Business.

Buy and sell Bills of Exchange on Great Britain, Ireland, and other foreign points. Issue Gommercial and Travelers' Credits in Sterling, Francs or Dollars, available in any part of the world. Make Telegraphic Transfers of Money between this and other countries. Make Collections and individuals. Members of Baltimore Stock Exchange. Buy and sell Stocks and Brown BROTHERS & CO., New York, Philadelphia and Boston. BROWN, SHIPLEY & CO., London and Liverpool.

Washburn & Moen Mnfg. Co., Worcester, Mass.







Iron, Steel and Copper Wire, Wire Rope, Barbed Wire.

XUM

Manufacturers' Record.

MANUFACTURERS' RECORD CO.

W. BIGSBY, Prest. R. H. EDMONDS, Treas. Wm. H. Edmonds, Secty. & Manager.

R. H. EDMONDS, EDITOR.

-OFFICE.-COR. EXCHANGE PLACE AND COMMERCE STREET BALTIMORE.

Naw York Office: Telephone Building, 18 Cortlandt St.

SUBSCRIPTION \$3.00 A YEAR.

BALTIMORE, SEPTEMBER 17, 1887.

Georgia and Alabama State Fairs.

We have already devoted considerable space to the Piedmont Fair at Atlanta, and urged its importance upon our readers. There are two other fairs for which great preparations are being made-the Georgia and the Alabama State Fairs-to be held at Macon and Montgomery, respectively. These fairs promise to be far above the average of such enterprises, and if the efforts of their managers are properly supported by the business men of the two States, they will prove of great value. The Piedmont and these two fairs ought to work in harmony and unitedly endeavor to make such displays of Southern resources as have never before been seen. Thousands of visitors from the North and West that will be attracted to Atlanta can, by proper efforts, be drawn to Macon and Montgomery, thus still further enlarging their conception of the magnitude of the mineral wealth of the South. In fact, it will be much easier to attract large crowds of Northern visitors to Atlanta, if it is known that there will be two other excellent fairs, in which full displays of minerals and timbers are to be found, immediately following the closing of the Piedmont. This will be an additional inducement to draw people South, as those who go will be mainly business men who desire the fullest opportunities to study the resources of the Southern States. The towns that are preparing for full displays at the Piedmont ought also to arrange, as some have done, for making exhibits either at Montgomery or Macon.

CLARENCE GORDON, 59 Liberty street, New York, advertises in this issue of the MANUFACTURERS' RE-CORD to buy or lease 5,000 acres of North Carolina land, well stocked with quail, woodcock and turkey.

MESSRS. E. A. KEELING & W. L. TRASK, of Memphis, Tenn., have commenced the publication of the Memphis Price Current and Southern Trade Journal. The first issue makes a very fine showing, and gives promise of a great success for this new journal.

Our Country's Chief Peril.

"Are we a nation of gamblers?" This question was asked by a retired merchant of high character and sterling integrity. His companion, the head of a great banking house, sadly replied: "I fear I must answer yes." They were conversing about the fluctuations of Wall street, and about the corners in foodstuffs that have been manipulated frequently of late years. "Oh," said the first speaker, "the papers talk about our danger in case of foreign war, because we have no naval defences, and of the ease with which the great ships of even some of the South American States could compel our seaport cities to pay tribute to them; but perilous as it is to remain in this defenceless condition, it does not trouble me half as much as it does to see the demorilization of the public mind brought about by the great gamblers of the country,'

There is good reason for such gloomy forebodings as these. Gambling of every degree and kind is an evil, if not a crime, Every State has laws more or less repressive that represent the enlightened public sense on this subject, but all these refer to petty things, while in Wall street and all the other commercial centers the evil increases, and has reached a magnitude exceeding anything this country has heretofore known. Railroad corporations, transportation and telegraph companies, and even the food of the people are at the mercy of the men who play for stakes as great almost as the wealth of the country. The honest investor no longer dares to buy stocks and bonds to hold for legitimate income. It is impossible to foresee how long it will be before the soundest and most valuable properties will be wrecked, not by misfortune or by "visitation of God," but by selfish operators with more millions than consciences, who care only for their own aggrandizement, and are utterly reckless of the sufferings of their victims.

It is bad enough that the small investments in stocks and bonds upon which the widow and the fatherless had depended for support should be made worthless, as they have been time and again by the manipulators of Wall street, but it is far worse that it should be in the power of one man, or of any combination of men, to force the prices of food and fuel to a point that carries suffering to the laboring millions of this country. These things have been and will be done until the public conscience is aroused, and State and national lawmakers are compelled to make all such evil acts and crimes punishable by law. It has been said that this is impossible, but that is a mistake. The same principle that underlies the laws against lotteries, policy shops and gambling houses, applies with equal force to these weightier evils. When men conspire together to advance the price of wheat or pork,

general consumption, by creating an artificial scarcity, they do an evil thing that is easily to be proven, and that ought to be severely punished.

Thus far the South has escaped to great extent the gambling mania that prevails in the North and Northwest. Her banks, cotton and produce exchanges have been notably conservative in their business ideas and methods. Her people, like those of all other sections of the Union, have suffered from the effects of gambling operations elsewhere, and as industrial development goes forward and wealth accumulates, they will feel it still more. The MANUFACTURERS' RECORD calls upon its readers to consider this grave subject, and to use their influence to arouse a public opinion against it. If this evil continues to increase in the same ratio it has for the last decade, it will demoralize all legitimate business, retard Southern progress, and work untold mischief in all parts of our land. It is the chief peril of the country. Let us all join hands to suppress it.

Last Year's Cotton Crop.

The cotton crop of the United States in 1886, according to the Commercial and Financial Chronicle's annual report, was 6,513,623 bales, against 6,550,215 bales in 1885, and 5,669,021 bales in 1884.

The consumption of cotton by Northern and Southern mills is given as follows:

Consumption. 1886-7. 1885-6. 1884-5. North'n mills...1,747,930 1,657,676 1,490,130 1,643,517 South's mills... 397,999 340,000 266,000 334,000

The cotton manufacturing business has been prosperous during the year, and the outlook is regarded as very promising. As to the new crop the Chronicle says:

It is, as usual, difficult at this date to give any definite or satisfactory indication of the extent of the growing crop. There are certain facts that we all know; they are (1) that there is a large acreage planted every year now; (2) that we have not by any means had a full or even an average yield on the acreage planted since 1882; (3) that this crop had an excellent start in the spring, followed by a faultless early growth, and (4) that up to the first of August the reports received with regard to the cotton plant represented it in a good, healthy and strong condition almost everywhere, with the promise of a heavy fruitage.

But for a month past, and from a constantly increasing number of points, there have come up complaints, growing daily louder and louder, of drought, rains and ods, of rust, shedding and worms, until a kind of dased or bewildered feeling has taken possession of those who desire, regardless of speculative interests, to obtain a correct diagnosis of the situation. At the moment the only advice we can give is to anchor fast to the facts which we have referred to above and wait to take a reckoning until the excitement subsides. That there has been harm done by drought, say in a third of Texas, and in portions of the Memphis district, is beyond question, but how far the drought has destroyed the plant's vitality beyond recovery can be better told a month or two hence. Elsewhere the situation is evidently somewhat spottedexcellent and never better in places, but in advance the price of wheat or pork, many other sections, either by drought or by or of any other thing that enters into

has been done. For instance, in Georgia and in North and South Carolina, we can but think that the promise to-day is for a considerable increase on last year's crop, and still there are places in each of said States from which the reports are discouraging.

A further hopeful fact is that the crop is an early one. The last crop was late, but taken as a whole the plant this year is better advanced than it has been on the first of September for several seasons. This remark does not apply so fully to the Atlantic States, and yet even in many portions of those States the maturity of the crop is in advance of a year ago.

Imports of Iron and Steel.

The imports of iron and steel for the first seven months (January 1 to July 31) of 1887 as compared with the same time last year were as

	Seven mor	July 31, 76.
ron ore, tons	684,560	605,093
rig tron, tons	Befl,ofe	000,810
Scrap iron, tons	219,815	46,653
Scrap steel, tons	90,786	3.728
Bars, railway, of Iron, tons	46,003,864	34,748,910
Bars, railway, of steel, tons	53,037	29,995
Cotton-ties or hoops, ths	14-997-945	11,657,760
Hoop, band and scroll iron, he.	50,444	953,867
Hoops, bands, &c., of steel,"	34,579,476	4,884,677
ingots, blooms, &c , " ", Sh't, plate & taggers' iron, Ibs.	6,860,037	5,330,865
Tin plates, Re	377.532.409	378,189,578
Wire rods of iron or steel, Bas	130,000,658	199,742,508
Wire and wire rope, Bs	3,245,853	3,606,500
Anvils, axles and forgings, Du.	1,909,580	1,348,300
Chains, of iron or steel, Ibs	970,559	794,931
Cutlery Files, file-blanks, rasps and	\$191,218	\$164,333
floats	5,371	4,568
Fire-arms	195,544	200,485
Machinery	260,497	729,650
Needles	23,299	85,090
All other	136,135	119,615

The Elyton Land Co.

The Age, of Birmingham, pays the Elyton Land Co. and its able president the following well-deserved compliment:

The Elyton Land Company was launched m a most comprehensive policy with its origin. James R. Powell fed it with the nourishment of a catholic and generous spirit. Henry M. Caldwell has strengthened its original purposes by widening its scope immeasurably. From the first day to th time it has pursued the course it started upon without wavering or shadow of change. Last fall, winter and spring, the Elyton Land Company was the balance-wheel which kept Birmingham in its course of solid prosperity. It found itself facing an opportunity to realize an incredible fortune by entering upon a speculative market. It turned its back upon the opportunity of the oment to lay the foundation for the solid glory of this city in the lives of generations to come. It might have sold all its posse sions at fabulous prices for gold in hand. It might have bankrupted the usands of lators; but it remains rather to fulfill its destiny in the promotion of the welfare of all who live here or may come here. Of course, its president and directory are not running a charitable institution, but it cannot be denied that their wisdom in serving their own interest is tantamount to a publi benefaction

Under President Caldwell's management the Elyton Land Company has probably been the most remarkably successful enterprise of the kind ever known in this country. While making its stockholders rich, it has at the same time virtually made Birmingham.

ADVERTISERS wishing to reach the manu facturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the MANUPACTURERS' RECORD.

say what the facts will not sub-

Some Mistakes of the Baltimore Sun.

The people who are so unfortunate -if such there be-as to be dependent entirely upon that brilliant journal, the Baltimore Sun, for their news deserve sympathy. It is true that in the course of time they may be able to learn of what is going on in the world, for the Sun does, in its way, try to give some of the news of the day, but it is just as likely as not to be two or three months behind the times. It is quite a common thing to find in the columns of the Sun. paraded as something fresh and interesting, information about the South that had appeared in the MANUFAC-TURERS' RECORD weeks before. Of course, the Sun never gives credit. A little illustration of the freshness of its news was given in its issue of September 8. To show how fresh it was we use the always interesting parallel column business:

PARTAILET COMMITTIES OF THE MANUPACTURERS' RECORD,
Yuly 23.

It is not often that eight railroads are at the same time under construction to any one place, however important it may be. And yet our correspondent, writing from Estilley Valley Vall to any one place, however important it may be. And yet our correspondent, writing from Eatill-ville, Va., points out the fact that eight roads are now either actually being built, or soon will be, all to meet at a place where a town has not yet been laid off even. Big Stone Gap is the name of this remarkable place. It is a great gap in the range of mountains dividing Southwest Virginia and Eastern Kentucky, and of necessity the railroads building in that direction must Kentucky, sustificated building in that direction must cross the mountains at this place. It is one of nature's marvels. Just by the side of the river which has broken its way through this great mountain range, there is said to be a most beautiful site of 1,200 acres for a town. Here it is proposed to proposeu dustrial town, unlimited

From Baltimore Sun
September 8.
Eight railroads are now
either actually being built
or soon will be, all to meet
at a place where a town
has not been laid off even.
Big Stone Gap is the name
of this remarkable place.
It is a great gap in the
range of mountains dividing Southwest Virginia
and Eastern Kentucky,
and of necessity the railroads building in that direction must cross the
mountains at this place.
It is one of nature's marvels. Just by the side
of the river which has
broken its way through
this great mountain rarge
there is said to be a most
beautiful site of 1,200 acres
for a town. Here it is
proposed to build an industrial town, and with
the unlimited supplies of proposed to build an in-dustrial town, and with the unlimited supplies of fine ore and the Elkhorn coking coal and limestone in abundance, this place

It was only about six weeks behind time, and that is not very much for the Sun.

However, its shortcomings in this line could be forgiven if, when it does attempt an original editorial, it would come within a reasonable distance of truth. Discussing Southern progress a few days ago, the Sun said:

"Northern men control for the most part the iron industries."

It is unfortunate that the stupidity of the Sun should lead it into unjust and untruthful statements about the South. It is enough that people of that section who have displayed such almost superhuman energy in the development of their mineral resources, should be misrepresented by their open enemies, but that their professed friends should do the same is rather too much to stand.

There is of course much Northern money invested in Southern iron interests and many Northern people have taken an active part in this industry, and the MANUFACTURERS' RECORD wishes there were still more, but to say that the great development is due to Northern men and money, or to say that Northern men control this industry, is to or six months for \$1.50.

stantiate. Take, for example, a few of the great enterprises now in the South. One of the leaders, if not the greatest leader in the marvellous coal and iron development of Alabama, was H. F. De Bardeleben, who boasts that he is a "piney rooter" of the South, born and raised there. It was De Bardeleben who gave the greatest impulse to this business, and it is he who is to-day building four of the finest furnaces in America and a \$500,000 rolling mill in Bessemer, Ala. Starting with almost nothing, he counts his money probably by the millions and his land possessions by the tens of thousands of acres. The great \$8,000,000 company that is building four immense furnaces at Sheffield, and a hundred mile railroad to furnish ore and fuel to them, is headed by Col. E. W. Cole. a noted Southerner, while the other furnace company there has for its president another Southerner. Dr. H. M. Caldwell, who, as president of the Elyton Land Co., has virtually made Birmingham, the great iron center of the South-a man of consummate ability, whose record in the management of his company has never, we believe, been surpassed in the financial history of this country-is a Southern man, and was a surgeon in the Southern army. President Johnston, of the Sloss Steel & Iron Co., of Birmingham, with capital of \$5,000,000, is likewise Southern, and so is A. B. Johnston, who was the general manager of the Coalburg Coal & Iron Co., of the same place. The success of the Woodstock furnaces of Anniston and the two owned by the same people at Clifton and Jenifer, noted as among the most profitable iron enterprises in America, is due to Mr. Samuel Noble, a man of remarkable ability, and while it is true he was born in England, he and his brothers, who have managed these furnaces and their great rolling mills, car-wheel works, etc., were taken by their father to Georgia when but mere boys, or about 32 years ago, so that they are almost as much Southeners as though born there. Among the other noted Southern men that have taken a leading part in the development of the iron interests of their section may be mentioned Joseph R. Anderson, presi dent of the Tredegar Iron Works, of Richmond, which employs nearly 2,000 hands; Wm. E. Tanner, who built the immense Tanner & Delaney Machine, Engine & Locomotive Works at the same city; Senator Jos. E. Brown, and a dozen or more others. Will the time never come when

the people of the South shall receive full credit for their work in the tremendous development now in progress?

If you are not already a subscriber to the MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year,

Great Birmingham.

Under the above heading the Daily Herald, of Birmingham, talks of that wonderful town as follows:

In a valley where the black diamond in exhaustless seams is buried in the bowels of the earth, and in whose mountain ridges illimitable quantities of richest iron ore still lie untouched by man, Birmingham rears its splendid buildings, resounds with the uproar of machine shops and factories, blazes brightly with its furnace fires, pulsates with energy and enterprise, and is now on the march at double quick f r still greater and grander achievements.

A spirit of discontent, at once peculiar and gratifying, has possession of its people; discontent, which is yet the highest evidence of contentment, for Birmingham, compared with any other city or town, is to them "the be all and end all" of modern progress and advancement, but still is nothing to the wonder that will be. Not content with what is, their effort is to distance all the past, ave, to distance expectation itself and have a city here which shall be more prosperous than any told of in fable or history, and peopled by tens upon tens of thousands of loyal, intelligent, progressive and happy human beings.

In possibilities of manufacture, Birmingham is unequalled by any city in North America. Iron can be made here cheaper. Steel making is almost a certainty. The Herald believes that steel will be produced in Birmingham before 1887 shall join the innumerable caravan of departed years. Wood of every fibre and strength is in easy reach, and cheap. Steel, iron and woodwhat is it that cannot be made of them Birmingham can utilize these possibilities in the infinite enrichment of herself and Alabama. Coal is close at hand. A drill has already passed through a stratum of rock strongly impregnated with oil. The clearest and purest artesian water has been reached within 700 feet of the surface of the ground with n the past seventy-six hours. Two companies are now boring for natural gas, one of them with the best indications that it will soon be able to tap a reservoir.

Commercially, Birmingham's advantages The world will not give are the best. credence to the statement of the fact, but investigation is courted, that one bank in Birmingham has more deposits than all the banks in Atlanta or Montgomery; and that the banks in Birmingham-they number seven-have now on deposit more money than all the banks of Georgia combined. Railroad facilities are now good, and several more trunk lines will be into Birmingham by January 1, 1888: When the roads now in course of construction shall be completed, cars propelled by steam will come into Birmingham over tracks owned by seventeen different railroad companies. And this within less than six months from to-day. Without a coal mine, an ore bank, or a block of limestone, Birmingham would become a big city, made by its commerce alone.

These things are eloquent with what is

These things are eloquent with what is and what will be; and still there is that and what will be; and still there is that which is a more powerful factor in having done what is now done, and in doing what is yet to do. The Herald feels its throb daily and nightly. It is the inspiring love of all the people of Birmingham—the men, the women and children—for their city; a passion which makes all workers for its all the people of birmingnam—the men, e women and children—for their city; a assion which makes all workers for its wancement and glory, friends and brothers, te grand co-operative organization for the ablic welfare and the city's weal.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANU-FACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

An excellent illustration of the way business is being pushed in the South, and at the same time of the value to the South of the new enterprises that are being established there, is found in the Decatur Iron Bridge Co., of Decatur, Ala. About six months ago, when the wonderful change in the life of the town took place, and it waked from its long sleep to the most surprising industrial activity, among the twenty or more new manufacturing concerns organized was one to build iron bridges. The works of this company were commenced, and about one month ago they were ready for business. Already contracts have been closed for building eight iron bridges, one of them to cost \$200,000. Without the existence of this company it is probable that the money for building a number of these bridges would have gone out of the South. Now, Southern ore that is turned into iron in Southern furnaces goes into Southern works and comes out finished bridges. From beginning to end, wealth is created and employment given to many hands. Of course, these are not by any means the first bridge works in the South, but they add one more great industrial enterprise to help make rich the whole South.

The Southward Trend of Industry.

Discussing the growth of the South's iron interests in its relation to the North, the Practical Mechanic, of Worcester, Mass., says:

The development of extensive iron mines in the South is viewed with a feeling somewhat akin to uneasiness by many of those engaged in the iron working industries at the North. The signs of the times seem to indicate to them, the uprising at a new base of supply, of a rivalry, which it will soon be difficult for those at a distance to successfully cope with.

The center of iron production appears to be moving still further away from the Northern iron workers, and the increasing distance between the raw material and the places of its manufacture will soon operate to the serious disadvantage of the latter. Manufacturers must therefore soon move nearer to the source of supply. One cause of the spirit of discontent among Worcester manufacturers, elsewhere alluded to, may be found in the situation here described. Then, too, it is asserted that the new interstate commerce law increases the cost of bringing the raw material North, even from the old Pennsylvania iron centers. With extensive mines opening at a distance at a rate which promises an abundance of cheaper material, and hampered by Congress in the matter of transportation from the old mines, and having in view the certainty that extensive iron-working industries will soon spring up near the new sources of material, it is not surprising that some of the old Northern iron concerns are beginning to study the situation seriously. While there is no occasion for immediate alarm, the natural and inevitable tendency of affairs can readily be discerned. To the argument that much time will be required to establish and develop in new locations plants which can rival those of a long established record, it can be answered that skill and enterprise are things of exceedingly rapid transit, wherever circumstances present an opening.

MEMPHIS, TENN.

The Marvelous Growth of the Bluff City.

Some of the Causes and Indications of the Growth.

The Second Cotton Port of the Country, with Manufacturing Interest Being Largely Developed.

A Thriving City on the Great Father of Bivers.

[Special correspondence MANUPACTURERS' RECORD.] MEMPHIS, TENN., Sept. 1, 1887.

THE BLUFF CITY ON THE MISSISSIPPI.

The city of Memphis is situated on the east bank of the Mississippi on Chickasaw Bluff, standing upon an elevation of from thirty to forty feet above the highest water mark ever known. Geographically the city has no superior in the advantages for trade and commerce. It is the great gateway of emigration and commerce to the near or far West. Nature seemed to have marked this place out as a great crossing center of civilization, and the rapidity with which the territory for miles around has been filled up by a teeming population attests this assertion in no questionable

Few cities in the South have so many natural advantages as the Bluff City. With the great Father of Rivers at her very and nine diverging railway lines stretching out over the country, her commanding position is seen at once. There seems to be no question, that in time Memphis will be the interior as well as the great cotton mart of the South. Her receipts for the past five years have been constantly increasing, until she can now boast of handling nearly three-fourths of a million bales of cotton, which brings a yearly business to the merchants and factors of nearly \$20,000,000.

To day the city has a population of 75,-600 and is growing at the rate of 10,000 yearly. Beyond all question it is the greatest inland cotton market in the world. receiving 700,000 bales, and increasing 100,-000 bales per annum. Memphis has the largest grocery trade (population considered) of any city in the United States. It has secured, in a great measure, the commerce of eight States tributary to her mar-She transacts \$150,000,000 of business on banking capital of \$3,000,000, has an insurance capital of about \$2,000,000, rejoices over the fact that nine diverging lines of completed railway run into the city while four new lines are under contemplation. Seventy-six trains arrive and depart daily, while the whistles of fifteen steamers on the great Mississippi record the fact of their arrival and departure daily. Memphis is at the head of perpetual navigation on the grandest river of the globe -hence cheap markets for her commodi-The city has forty-five miles of most excellent sewerage and twenty-five miles of good substantial pavements, and it is therefore no wonder that she has become celebrated for her good health record and excellent sanitary condition. There are thirty-five miles of street railways and thirteen miles of steam street car lines traversing the city. She has forty-three public and private schools, which are a credit not only to the city, but to the State at large. Eighty-five Christian temples of worship adorn the city. Fifteen newspapers dis seminate the news. Eleven cotton-seed oil mills are found here in successful operation, while six large flour and meal mills, with

The above are facts, but Memphis has a

an output of 1,500 barrels per day, furnish

the people with these necessary articles of

with her prosperity. As already stated. there are nine railroads converging here, while there are other railways building that will reach Memphis as soon as industry and energy can complete them. So, with railroad communication to every State in the Union, with several trunk lines leading directly here, and going off through the western parts of Mississippi. the richest agricultural section of the globe, through West Tennessee to the blue grass regions of Kentucky, straight through Arkansas, to the inexhaustible plains of Kansas, and the pasture and green fields of Missouri and semi-tropical clime of Louisiana, the emigrant from the crowded populations of Europe, the prospective settler from any of the Eastern and Southern States, will find all the accommodations of secure and pleasant travel on lines that lead into Memphis, and on reaching this section of the country will observe much to attract his attention and plenty of avenues by which he may engage his time, talents and money to great advantage and sure profit.

THE TRADE OF MEMPHIS.

Your representative is especially indebted to Mr. E. A. Keeling, secretary of the Merchants' Exchange, a man of large views, experience, and energy, for the following statements concerning the trade of this rapidly growing city of the South: The trade of Memphis is growing very steadily, far more than many of her people realize. It is both substantial and sure. There is no falling behind, but a firm and steady push ahead every year. The people work and pull together with a firm and determined purpose. There is no rushing into booms, but a firmly marked out course of improvement which goes on from week to week and year to year. Our trade is increasing yearly; for the year just ending it will amount to about \$150,000,000 divided

Cotton	30,150,000
Groceries and provisions	20,000,000
Grain	1,200,000
Dry goods	6,827,000
Boots and shoes	2,647,000
Cotton seed and C. S. products	1,500,000
Lumber	8,000,000
Fruits	100,000
Miscellaneous, such as drugs, hard-	
ware, engines, boilers, wagons, jew-	
elry, paper, queensware, marble,	
hides, furs, wines, liquors, beer, fur-	
niture, and manufactured products	
of all kinds	85,000,000

"This," says Mr. Keeling, "is a great increase over last year's business. During the past year there have been erected here 400 new buildings, ranging in value from \$165,000 down to \$500, amounting to a total of \$1,500,000, being as much as was spent in the two years previous. Our Memphis brick yards made 35,000,000 bricks the past twelve months, all of which were used here. Our receipts of cotton for the past twelve months will reach 670,000 bales, amounting in value to \$30,150,000: this shows an increase over last year of 117,000 bales, and over two years ago of 235,000, which proves conclusively that our trade is being extended and that new territory is being opened up to us by the progressive policy of our new railroads. It may be safely asserted that all of our manufacturing concerns have doubled their capacity, while the business has increased most wonderfully.'

The increase of industrial enterprises in Memphis during the past few years has been more remarkable than the increase in population. The wonderful growth of manufactories is due to the cheapness of coal and land, the convenience of supplies and the abundance of contented labor,

NEW INDUSTRIES.

There seems to have been more or less of an idea, finding expression now and then (but most happily only among the fogies and mossbacks) that Memphis presented no unusual advantages as a field for new industries and as a manufacturing center. The facts in the case, however, knock this

tages always desired for manufactures are cheap ground for buildings and enlargements, a good supply of labor, cheap fuel, abundant transportation facilities, reasonable taxes and good protection. Every one of these necessities can be found in Memphis; real estate cheaper than in any city of its size in the South, a large and rapidly growing population, fuel so cheap as to be of little consideration in ordinary manufacturing enterprises; abundant competitive transportation by rail and river, and taxes based upon such a low valuation and exempting so much usually taxed in other cities as to make comparisons useless To illustrate the methods by which Memphis is pulling ahead in all the material wealth which surrounds her I call attention to the following new enterprises perfected and being perfected during the present year:

-	
Gas Works	900,000
	FAA 000
of every description	000,000
New Water Works	500,000
Southern C tton Oil Co	100,000
Ice Factory	75,000
Star Oil Mills	00,000
Wetter Manufacturing Co	50,000
Box Factory	25,000
Pump Factory	20,000

Thus it will be seen that during the present year this city will expend nearly three millions and a half dollars for the establishment of new enterprises which must redound to her already growing fame as a commercial and manufacturing center.

MANUFACTURING INTERESTS.

While Memphis has lost none of her prestige as one of the great cotton markets of the world, she has improved in another particular in more wonderful proportion, and this is in her manufactories. Her people have begun to realize that it is not now (if it has ever been) necessary to send abroad for home supples, at great cost, when by a diversity of industries these things can be obtained in their own midst. On this wise plan Memphis is growing and enlarging.

What Memphis needs to make her one of the foremost manufacturing centers is to utilize at once her great advantages. Here is one of the finest openings in the world for a large cotton mill, which will not only convert the fleecy fibre into domestics, sheetings, &c., but to make a large variety of cotton and woolen goods, such as the mills of New England manufacture. There is at present only one factory in the city-the Pioneer Cotton Mills-which pays handsomely.

And yet Memphis is not a laggard in the race of manufactories. She is keeping up her end of the line in our Southern industrial progress. Here will be found eleven cotton seed oil mills, all doing a healthy business. The capital invested in this industry is over \$1,000,000. In 1890 the entire product of all the oil mills of Memphis was only \$835,000. For the year 1887, or from October 1, 1886, to May 30, 1887, the products of these eleven mills will be nearly \$1,500,000.

Here are also to be found the following manufactories and industries, which only include the more notable. The Milburn Gin & Machine Co., the Livermore Foundry and Machine Co., the Chickasaw Iron Works, the James & Graham Wagon Co. the Lilly Carriage Co., Memphis City Mills, the Eagle Milling Co. (flour), R. L. Cochran & Co. (lumber), Cole Manufacturing Co. (lumber), marble and stone works, Memphis Brick Manufacturing Co., clothing manufactory, stoves and tinware. Although Memphis is not in a position to boast of many extensive manufacturing industries, vet there are many small establishments springing up every year which add very materially to the wealth of the city.

GENERAL MERCHANDISE.

Memphis's trade grows every year—the vast territory now being brought into future that must be taken into account idea completely out of time. The advan- close juxtaposition to the city by the new

rallroads increases her mercantile busin yearly. The increase for three months this year in this business has been at the lowest estimate 334 per cent, over and above the done during the same time last year. No better evidence can be obtained of the state of trade than the clearing hou statement for the first three months of this year, which shows an increase of clearances over the same time the previous year of \$8,470,893.92 Here are the official figures:

January, 1866	. 7,963,607.78
Increase in 1867 February, 1887 February, 1886	\$ 9.657,448.87
Increase in 1887	\$10,895,978,97
	A 0 405 000 ED

In conversation with a number of the representative merchants of the Bluff City I was surprised to learn that many of the houses could not supply the orders coming in daily. A wholesale dry goods dealer mentioned in connection with the growth of the city, that quite a number of merchants from the South and West who in the past had purchased their goods in New York were now coming to Memphis and obtaining their needed supplies. general line of trade in the mercantile business has increased from 40 to 50 per cent. during the present year. seems to be no question as to the ultimate success of Memphis as a great distributing point not only in her mercantile business but in other avenues of trade springing up from year to year.

A COTTON PORT.

To-day Memphis is the greatest entrepet for cotton in the United States, as well as the great depot of supplies and the initial distributing point for products. She is struggling to obtain the trade of the South and Southwest, and with the exigencia the times, in railway building and river connections she will yet gain the prize

With the centering of an industrious population in the far-famed Mississippi valley, with new ideas, skilled manip tion and improved farming implements, the production of cotton, as well as the cereals. will tend to make this city not only the largest interior market in the United States, but it will only be a question of time when she will become the largest cotton market in the world.

Her receipts for the past five years have been constantly and steadily increasing until the fiscal year just past, closes with Memphis having handled three-fourths of a million bales.

Course of the cotton market during the cur rent season, from September 1st, 1886, to Murch 20th, 1887.

It is to be doubted if there is a cotton port in the country which offers greater and more varied inducements for the better and more expeditious handling of the fleecy staple than will be found in this city. Commodious warehouse and cotton s all in close proximity to the railroads and the wharves is a very great advantage in the moving of this crop from the producer to the consumer. Exposure of the staple is never permitted. The large warehouses, with several more going up give all the shelter requisite for the handling of the crop.

In no city will there be found a mor imposing and magnificent Exchange Building. Here the Cotton Exchange and Merchants Exchange are in close juxtaposition, the one occupying the left wing of the building and the other the right wing, The artistic finishings of the rooms of the new exchange are models of exquisite beauty and architecture, and impress the stranger most favorably. This building stands out as a monument to the progress and push of the people of Memphis.

TRANSPORTATION FACILITIES.

No one doubts in this age the vital importance of railroads. A city's commercial importance is almost entirely dependent upon its railway facilities. price of transportation is a controlling element in commerce Every day proclaims this as an assured fact. New towns springing up and old cities taking on new life attest the great importance of railroads, and nowhere is "a betterment of condition" more forcibly illustrated by the work of railroads than in the city of Memphis. A glance at any railroad map will show the perfection of the railway connections of this city. They are as follows: The Memphis & Charleston Railroad; the Louisville & Nashville Railroad; the New port News & Mississippi Valley Railroad the Kansas City, Springfield & Memphis Railroad; the Memphis & Little Rock Railroad; the Louisville, New Orleans & Texas Railroad; the Mississippi & Tennessee Railroad; the Memphis, Birmingham & Atlantic Railroad.

These eight railroads are in successful operation and furnish shippers choice of competing lines to all points desired to be reached.

The river trade of Memphis, notwithstanding the encroachment of the numerous railroads, still forms an important factor in the commercial and business interests of this growing city. The lines verging from Memphis on the waters of the great father of rivers are as follows: The Lee Line. the Memphis & Vicksburg Packet Line, Arkansas River Packet Co., the Memphis & White River Line, the Memphis & St. Francis River Line, the Memphis & Tiptonville Line, the Memphis & New Orleans Line, the Memphis & Cincinnati Packet Co. Resides a number of transient lines hailing from above and below the city. So, in the matter of transportation facilities Memphis is peculiarly favored.

NEW RAILWAY LINES.

Memphis is always "wide awake" to the development and progress of the age, and in no respect is this exemplified more than in her eager desire to obtain additional railway facilities. Here are a number of prospective lines: Kansas City, Memphis & Birmingham Railroad, which is now nearly completed. This road will open the inexhaustible coal, iron and timber fields of Alabama, and, as Memphis is the nearest point to Birmingham, this line will be of great benefit. The Bald Knob Railroad, a branch of the Iron Mountain Railroad, will be completed by the 1st of October. This road gives direct connection to all points in Texas, and will add at least 100,000 bales of cotton to the trade of Memphis. The Tennessee Midland, from Memphis to Knoxville, and, in fact, passing through the entire State, is now being constructed, and when completed will give a direct connection with the Baltimore & Ohio system in Virginia. The Illinois Central is now surveying a line to Jackson, Tenn., which will give a more direct connection to the cotton fields on this great line of railway. The Memphis & Little Rock Railroad will soon be extended from Little Rock to Hot Springs, and from there into the State of Texas. Surveyors are now busy laying out a road from Memphis to Jefferson, Texas. This will open a large and rich territory. With the prospect of these additional railways, the Bluff city has a right to rejoice in the outlook for the future. Certainly every condition appears most favorable for the furtherance of the commercial as well as her manufacturing prestige.

DUMMY LINES.

With the great advantage of railway and river facilities, the Bluff City intends also to place at the convenience of her citizens, mechanics and laborers a dummy line over five miles long encircling the entire city. This will open up a very de. sirable portion of the city limits for the purpose of manufacturing sites, resident property and grounds for pleasure resorts. In this respect Memphis will eclipse many of her sister cities, as it may be stated upon the very best of authority that in no city will there be found more cheap and desirable property within seven minutes ride of the best business part of the city. Your correspondent made a tour on the greater part of this line and feels confident n asserting that he has seen no locality offering more splendid inducements for the home settler and the manufacturer, as well as the capitalist desiring to invest his surplus money.

Memphis of to-day is one of the cleanliest cities of the South, and in no essential element pertaining to her sanitary condition is there left open a loop hole by which disease or epidemics can take root. The past year has been marked by unusual good health. No one disease has prevailed to the extent of epidemic, and the death rate, considering the increase of population, is less than preceding years.

If cleanliness and that due attention paid to the laws of sanitation can make healthy city, then Memphis may be placed in the category of healthy cities. The system of sewerage throughout this city is most thorough, and, with the latest devices and improvements in this very important element of health, it may be safely stated without the fear of contradiction that in few cities of the world will there be found such excellent and systematic arrange ments provided as will be found in these sanitary measures. The Health Department of the city is one of the most thoroughly devised and operated that can be found anywhere. The total expense of this department of this city amounted last year to \$27,885.43. A thorough course of inspection of the city is made daily, and, owing to this system, it is no wonder the Bluff City is to be found so delightfully clean and healthy even in the very midst of the dog-days in the sweltering days of mid-summer. The most excellent supply of artesian well water, pure and cool, is one of the great blessings which Memphis enjoys. In this respect she is most abundantly supplied and the number of cures of people from abroad attest the efficacy of

A TALK UPON MATTERS PERTAINING TO THE CITY'S GROWTH.

The representative of the MANUFACTURERS' RECORD had the pleasure of meeting Messrs. Thomas and Rogers, of the firm of Stratton, Thomas & Rogers, at the head of the Real Estate Exchange, and was pleased to find these two gentlemen ready and willing to give all the necessary information relative to the progress of the city as well as her needs of the present day and generation.

Your correspondent asked Mr. Thomas what was the cause of the rapidity with which Memphis has stepped ahead during the past year or more, to which he replied.

"A better city government, strict attentention paid to the laws of hygiene and sanitation, the establishment of new manufactures which have been successfully operated, a large demand for residences and business blocks, the almost perfect transportation facilities for the raw material and the manufactured product, the cheapness of property in comparison with other leading cities, together with the perfect sanitary arrangements which the city of Memphis now leads the country. These

are the chief reasons why Memphis has taken a 'fresh start' in life, and, judging from the present outlook, the prosperity of the city will continue right along from year to year. I judge this to be true from the fact that during the past month over \$800,000 of outside capital has sought investment here, and most of this comes from a class who do not buy for speculative purposes, but with the intention of making permanent improvements. Besides this, the many and constant inquiries from outside parties as to the investment of money here for manufacturing purposes leads me to believe that the growth of Memphis has just begun. The outlook is certainly encouraging."

Engaging Mr. Stratton's attention, your correspondent asked what was necessary to further push Memphis ahead in all the industrial methods pertaining to progress and developments. He replied:

The establishment of more manufac tories of all kinds and natures which would give employment to skilled labor. We have enough raw material here to make this place the workshop of the South. The immense amount of coal, iron and wood brought here so cheap by the railroads offers inducements for a great number of manufacturing establishments, which would pay from their inception. We want a greater diversity of pursuits. and if we had here a number of cotton factories to manufacture our raw material into articles of use, we should soon be a second Lyons or a Manchester. It is only a question of time. It must all come in due season. We are getting a strong inkling of it now. With our railroads pene-trating the center of our vast coal and iron regions, and pushing through our wonderful forest growth, the situation cannot long remain as it is. I predict that within the next twelve months we shall have over 100 new manufactories, and why shouldn't we? Our advantages are unsurpassed On the line of perpetual navigation, with railway facilities hardly equalled and a climate more than favorable, with cheap lands and magnificent factory sites and the raw material right at our doors, I see no reason why Memphis should not become a great manufacturing center. Our property is cheaper than in any other city in the We do a business of 40 to 50 millions a year. Buildings of all kinds are going up everywhere, in fact there are so many resident houses now under construction that to-day it is impossible to supply the demand for them. Therefore, with all these advantages, I feel certain that Memphis offers many more inducements-and all, too, of a substantial nature -than most places in the far West, and am confident that a great future awaits us in the natural exigencies of the times. Our great belt line encircling the city places in the reach of all capitalists some of the most desirable manufacturing sites that can be found in the country, and in seven minutes time from the center of the city locations for elegant homes and country cottages.'

NOTES BY THE WAY.

The Milburn Gin & Machine Co. is one of the progressive establishments of this city and, in fact, of the entire South. The scope and variety of products turned out by this enterprising concern are perhaps larger than of any similar establishment in the South. Their extensive works are located in the southern part of the city and is an ornament and a pride to the State. They manufacture gins, feeders, wood pulleys, condensers, linters, and cotton-seed hullers, and their work has been recognized far and near for its skilled workmanship and durability, another firm having sent them an order for several hundred cotton-seed hullers, so pleased were they with their work, and the manner of finish and construction. They employ

over 190 hands. They pay out in wages over \$125,000 annually, while their business for the past year amounted to \$632,150.80.

The Chickasaw Land Co., of which Mr. J. A. Van Hoose is vice-president and general manager, control over 3,175 acres of high rolling lands immediately adjacent to They have a long wharf front-Memphis. age on the Mississippi for manufacturing sites. They offer free sites for factories and homes for operatives. It will be well for capitalists and investors to send for further information regarding these advantages before investing elsewhere. It is the intention of the company to locate a large park on this land near the city and to make an outlay of many thousand dollars in the improvement of this property. Already over \$200,000 have been spent by this company in locating and placing sites for manufactories, residences and business blocks. Here is a splendid chance for the investment of money, either in homes or farms or manufactories, in close proximity to one of the most thriving cities in the

Memphis is on a steady march of improvement-there is no mushroom boom in her growth. Her people are conservative, yet in affiliation with the march of progress Her position as a cotton port is assured, She will not long be behind in industrial skill and manufacturing supplies. It is only a question of time. The people are progressive. No city can surpass Memphis in sanitary measures. There are no more fears to be entertained regarding epi-demics. Memphis of a few years was a laggard in the race of industrial progress; to-day she is the leader on the Mississippi in all things which go towards making a city prosperous, homogeneous and happy. HINTON A. HELPER.

"Fair Florence."

The Troy (Ala.) Messenger editorially says of Florence, Ala:

Florence is one of the loveliest little cities in the South. The town is built on the high bluffs of the Tennessee river and is clean, dry, shady and healthy. Its present population numbers about 2,500 souls, but the increase this fall and winter will perhaps double this number. The Florence Land Co., of which Judge Wood is president, is doing a noble work for the town. Florence has three splendid weeklies, each of which is watching with a zealous eye the advancement of their lovely city.

The grading on the Nashville & Florence Railroad is about completed and the track will be laid right away. This road will develop a large scope of country north of Florence heretofore untouched by railroads.

There are many new enterprises now in course of construction, and it is something wonderful to see the number of residences that are dotting the pretty building sites all over the city and suburbs. Florence is situated at the foot of Mussel shoals on the Tennessee river, at the head of navigation for large boats, and right between the great coal and iron fields of Alabama and Tennessee. This gives her advantages that few cities in the South possess, and she will certainly become the queen city of the Tennessee at no distant day.

THE MANUFACTURERS' RECORD confines its enterprise chiefly to the discussion of facts and theories respecting the Southern States. In this noble work it exercises an influence, both direct and indirect, of the greatest weight. Its many beautifully printed and ably edited columns are, indeed, weekly advertisements of the resources, the industries and the general condition of the South, and which insures a widening knowledge of this section nowhere else to be attained.—Age, Birmingham, Ala.

Newsy Notes, Agricultural and Manufacturing, from Mississippi.

CO MANURACTI ABERDEEN, MISS. Sept. 12, 1887.

Sandersville, in Jones county, is agitating for a creamery and will probably have one Coldwater, in Tate county, is making large shipments of white oak staves to New Orleans.

The East Mississippi Cotton Mills, near Meridian, has recently been enlarged, many new spindles and looms having been added. Its orders are still largely in excess of its capacity, and its enterprising proprietor, Mr. I. S. Solomons, contemplates further additions to the plant.

The Stonewall Manufacturing Co. has greatly improved the plant of its splendid mills, near Enterprise, in Clarke county, to meet the enormous increase in orders. pays handsome dividends, and is one of the ost valuable properties in the State

Capt, J. P. Walker has sold a third interest in the mineral springs property at Lauderdale to Mr. J. S. Solomons, of Meridian. This means the restoration of this watering place to the fame and popularity it enjoyed in the South before the war.

The Planters' Cotton-Seed Oil Mill Co., at Greenville, has determined to double the capacity of its machinery, as much more seed is being offered than it can now handle.

The Greenville Times claims that enterprising valley town to be "the healthiest city of its size in the South."

Senatobia, in Tate county, is about to start a creamery.

The Agricultural & Live Stock Association of South Mississippi and East Louisiana commences its annual fair at Woodville Miss., October 25.

The North Mississippi Poultry & Pet

Stock Association opens its annual exhibition at Grenada, November 29.

Capt. J. C. Irving, of New Venice, on the South coast, has added a shingle factory to his other lumber industries.

Several vessels are undergoing repairs at the Scranton & Moss Point Ship-Yards.

The merchants of Vicksburg have rein forced their trade facilities by establishing a free ferry over Big Black river.

The street car tracks in Meridian have been extended nearly a mile.

Meridian water works have put up a num ber of hydrants at convenient points for the watering of wagon stock.

The Jackson Grain & Feed Mills are turning out a product of over 600 bushels a day.

Mr. Merritt Williams, of Longwood Washington county, has ten acres in Le Conte pears. His orchard is three years old and very promising. He also has twenty acres in red clover, which is as fine as America can boast, showing the adaptability of the Mississippi bottoms to this grand forage plant.

Mr. James Sweget, of Natchez, has one of the most noted stock farms in the Southern States. He has 1,000 acres in Bermuda grass and probably 3,000 more in other pasturage, upon which graze some 400 head of Ayeshire and high-grade cattle, and over a hundred head of thoroughbred racing stock and several hundred Southdown sheep. Among other notable horses bred by him 'Skobeleff," who made so much reputation in the West last season.

The clip from his flock commands the highest market figures, and his calves find many purchasers in distant markets.

ms county has always been noted in the South for its thoroughbred horses, and fine cattle and sheep, and the race course at Natchez was one of the most celebrated in the country in anti-bellum days,

Work is proceeding rapidly upon the steam cotton compress of Hazlehurst and the company expects to complete it in time to handle the present crop.

The vegétable and fruit growers' associa-

tion at Newton, in Newton county, organized August 20th with fifty six m co-operative workers; all of them well-to-do ers.

Columbus has a planing mill that is doing a flourishing business.

Aberdeen, among her numerous other industries, has a steam power sansage factory that does an extensive jobbing trade.

The Queen & Crescent Railroad is con structing extensive stock-yards at Meredian, with facilities for hauling twenty car load of stock at once.

The shipment of peaches from all parts of the State have paid handsome profits. This trade will be enormous next year.

The pioneer locomotive for the sea coast division of the Gulf & Ship Island Railroad was received a few days ago.

The official report of the fire department of Vicksburg shows but one fire alarm in

The Vicksburg water works system will

be in full operation by December 1st.

The Kansas City, Memphis & Birmingham Railroad, which extends through the State, will be completed by November, and the Aberdeen branch with its fine iron draw bridge over the Tombigbee river will be finished about the same time. This will afford an outlet on shortest haul, and a new market for the corn, vegetables, fruits, etc., of the rich Mississippi prairies. They are destined to feed the toilers in the Alabama mines.

The Tombigbee Railroad, from Columb Miss., to Decatur, Ala., expects to let out its contracts at an early day.

A survey for the location of a branch from Corinth, Miss., to Birmingham, Ala., has been made by the Mobile & Ohio Railroad, and it is expected that work will commence at an early day and be rapidly pushed to completion

The shipments by sea, of lumber, from the port of Pascagoula, on our South coast, for the week ending September 1st, am ed to 1.498,192 feet, and 4 500 shingles. Almost all of this was to foreign ports.

Moss Point, near the South coast, is erecting a new hotel.

The prospects for the early construction of a railroad from Meridian, Mississippi, to Pensacola, Florida, are flattering.

Work will soon commence on a railroad from Corinth to the Tennessee river, to strike that stream at or about Pittsburgh landing. The contract has been closed.

The sorghum crop, like all other crops in Mississippi this year, will be enor There will also be more molasses made in the State from the Louisiana or Cuban cane than heretofore.

The new cotton compress at West Point has commenced operations.

Prominent hog raisers in Illinois are corresponding with farmers in Mississippi with a view to shipping their hogs to this State to be fattened for market.

Mississippi merchants in all parts of the State anticipate a splendid trade this fall and winter.

The State treasurer has received bids at \$1.06 and accrued interest for the ten years six per cent. bonds of the State, authorized by act of the last legislature. Treasurer Hemingway advertised for bids for \$100,000 of these bonds, and received bids to the ount of \$222,600. He only accepted \$45,100, as it was believed that better prices than \$1.06 for \$1.00 could be obtained. The bidders were all Mississippians.

Col. J. F. Merry, general passen of the Illinois Central Railroad, Manchester, Iowa, has recently issued an illustrated pamphlet entitled "The Southern Home Seekers' Guide," which will be mailed to all applicants.

II If you are not aheady a subscriber to the BALTIMORE MANUFACTURERS' RECORD. send us \$3 and you will receive it regularly for one year, or six months for \$1,50.

A New Process in Cotton Manufacturing.

EUTAW, ALA., Sept. 10, 1887.

The Allen New Process is a recent inven tion of H. M. Allen, of this place, formerly of the State of Vermont, The process, con sisting of practically a single machine, take cotton in its natural state in the seed and separates the lint from the seed and forms it into first a sliver and then a roll, ready for the usual attenuating processes now in use in cotton mills, which prepare such a roll for the spindle. It is to be used in cotton spinning mills, and is adapted to the cottongrowing sections alone. It takes the place, you will observe, first, of ginning and baling on the plantation, dispensing with bagging and ties; 2d, of compressing for shipm ad, of all machinery at present used in spinning mills, up to and including the railway head, and, excepting one or two hands, dis penses with the labor necessary to attend to the machinery so displaced; and 4th, it requires a large per cent. less of power drive it than is required to drive the displaced machinery.

Again, the new process avoids the great injury which is done to the fibre by pressing and the torturing processes to which the lint is subjected in the present mill, and reserves the full length of the staple, thereby making the yarns of greater strength and the goods consequently more durable. There is practically no waste of cotton by the new process. Mr. Allen thinks he will probably be able to dispense with drawing mes, though he does not yet claim this fo his invention. The patent covers a specifi-cation of a device for making the fine numbers, but the inventor does not yet claim this as perfected.

The foregoing are principally the merits claimed for the new process. Mr. Allen has built and operated experimentally an imperfect working model of the machine, and it produces the roll beautifully and with rapidity. Those who have seen it in operation regard the practical success of the invention as demo strated, and it has created much interest in this State and in other sections. The right belongs to the Allen New Process Co., a body corporate organized here, and this company has donated to a cotton mill now being organized in this county (which is one of the finest cottongrowing counties in the State) the right to use the new process perpetually without royalty, and the stock of this mill, which is styled "Allen Process Cotton Mill No. I," is now being taken at the bank of Eutaw at this place. I. B. HEAD, Sec'v.

Wonderful Activity in Arkansas.

FORT SMITH, ARK., Sept. 10, 1887. Editor Manufacturers' Record

The prospect for crops in this section of the State and the Indian territory tributary to Fort Smith are unprecedented. The average is 25 per cent. greater than last year and the yield will probably exceed that of last year by 331/3 per cent. All the farmers ats are jubilant.

At least 800 buildings, including public, business and dwellings are in course of construction. Every house is rented as soon as the foundation is laid, and, with a population of 16,000, not a vacant building of any description can be found. Hundreds are living in tents, and the hotels and boarding es are crowded.

Mechanics are scarce; all who come find plenty of work at good wages. The brickyards, planing mills, etc., are all behind in their orders.

Railroad building here is active, both the Missouri Pacific and the St. Louis & San Francisco Railway are branches south from this city. The Arkansas & Kansas Valley Railway are building west through the Indian territory.

The Diffusion Process of Sugar Making.

United States Agricultural Commission Colman has recently returned from an official visit to Fort Scott, Kansas, where the department of agriculture is conducting experiments in making sugar from sorghum by the diffuess, and expresses himself as being delighted with the results obtained already. He says the experiments consist in the trial of a new process in making sugar in this country, which dispenses entirely with the costly and ponderous mills and steam engines, &c., and uses a far simpler and less expensive method of extracting the juice, by which all the sacchaeine matter is obtained, while by the former methods from 30 to 40 per cent. on an average of the juice, even with the Southern sugar cane, is left in the cane after passing through the mill, and with sorghum a still larger quantity, because of greater difficulty in extracting. The new process is called the diffusion of saturation process, and is as rapid as the old method, less costly, and enables the ma facturer to secure and utilize all the juice instead of about half, as heretofore.

The commissioner speaks in glowing terms of the work being performed by the Parkinson sugar works at Fort Scott, Kansas; also those being conducted by the department at Rio Grande, N. J., and, continuing, says:

The result of these experiments on the country will, I believe, be most beneficial. Our nation is paying \$100,000,000 annually to the sugar producers of other countries, and if we have demonstrated that we can profitably produce sugar on our own farms, it is a matter of the highest importance to the country. It will not only keep this money at home, but will save to our people \$50,000,000 annually in customs duties, cannot see why our people should not go to making sugar. A complete sugar factory will cost about as much as a flouring mill. and can be run at great profit, according to the present experiments. Farmers are glad to raise the case at \$2 per ton, and at that it pays better than other farm produce.

The annual consumption of sugar per capita is forty pounds. Our population doubling about every twenty-five years. At the end of the next twenty five years we will be paying at least \$200,000,000 for sugar per year. This money we can keep at home and distribute among our own people. I look upon these experiments as important to this co ountry as the invention of the cotton gin. They have demonstrated that we have a sugar plant that can be grown and con verted profitably into sugar south of the thirty-ninth parallel (out of the reach of early frost) to the Gulf of Mexico, and that this country can and will be independent of every other nation for sugar. It has taken a long time to overcome all of the obstacles that have been met, but they have been ome, as it now se

This new process will be tried on South-ern cane. I have arranged for conducting similar experiments in Louisiana with the ribbon cane, and we have all the necessary machinery now ready for conducting the most crucial tests in comparison with the best milling processes in existence. As the Southern cane does not mature until November, we cannot begin our experiments until that time, but I am sanguine of their success. I am not unmindful that there has been much enthusiasm expressed in the past The trouble was relative to sorghum sugar. relative to sorghum sugar. The trouble was
that under the old systems but forty pounds
of sugar per ton of cane could be oblained,
while under the new process much more
than 100 pounds is obtained. Therefore,
while under the old methods it was found
unprofitable to make sugar, under the new
system the largely increased yield will provide a profitable industry even at the present
prices of sugar.

I may be called enthusiastic, but seeing is
believing, and from what I have seen in the
past few weeks I believe that in a few years'
time everybody will admit that there is very
good ground for my present enthusiasss.

SEEFFIELD

* COLBERT COUNTY, ALA. *

The Iron Manufacturing Center of the South.

BEING at the head of navigation, and on the south bank of the Tennessee river, Sheffield is the natural outlet for the mineral and manufacturing products of Alabama and neighboring States seeking a water route to points on the Ohio and Mississippi rivers, and to the Gulf of Mexico, as well as the best distributing point over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. Four railroads certain, and several others assured. Principal shops of Memphis & Charleston Railroad will be erected here pursuant to written contract. These will employ between four hundred and five hundred mechanics, and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here.

Five Blast Furnaces Now Under Construction.

Of which one is nearly finished, and the remaining four contracted to completion next spring, have estimated capacity of 700 tons pig iron per day. This is 40 per cent. more than now manufactured at Birmingham, Alabama. Experts do not hesitate to say that iron can be manufactured more cheaply at Sheffield than at Birmingham, and its river transportation facilities will enable Sheffield iron to reach the principal markets at a saving of from

\$2.00 TO \$2.50 PER TON.

A first-class semi-weekly newspaper, printed by steam, is regularly issued. Furniture Factory, Bottling Works, Bakery, 3 Steam Brick Works, 2 Hand Brick Works, 2 Steam Wood-Working Establishments, Water Works, 2 Banks, a Savings Bank, and Steam Job Printing Office already in successful operation, and Iron Pipe Works, 15-ton Ice Machine and five story hotel, with all modern appliances, will be erected. The Cleveland Hotel, Park House and numerous boarding houses furnish accommodations to travelers. Postoffice, Telegraph Office and Express Office already established. Contracts have been made for the early erection of Electric Light Works, Paint Works and Agricultural Implement and Machine Works. Large Stove Works. Machine Shops, additional Iron Blast Furnaces, an extensive Charcoal and Chemical Plant, a large Rolling Mill and other manufacturing establishments under consideration, and will probably be built shortly.

Good Water. Free Public Schools and Churches. Health and Climate Unsurpassed. Drainage excellent. Splendid opening for men of push and energy. No "Old Fogy" element here. No better point for profitable investment.

for Manufacturing Enterprises,*

And for Free Public Schools and Churches

Donated by Sheffield Land, Iron & Coal Company.

Population January 1st, 1887, 700; now, (August 21st, 1887,) by actual count, 2,583. Increase of population, 300 per cent. in eight months, and only limited by accommodations.

Three years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three-story brick business houses, and one and two-story dwellings have been, and are being erected. The class of

buildings will compare favorably with those in cities of 20,000 inhabitants.

LIMESTONE of excellent quality for fluxing iron in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of brown hematite iron ore within twenty miles, along the lines of two Sheffield railroads. The Sheffield & Birmingham Railroad runs through the heart of the Warrior Coal Fields, which abound in first-class coking, steam, gas and grate coal. Timber is abundant and cheap.

The Memphis & Charleston Railroad and the Sheffield & Birmingham Railroad are now in operation into Sheffield. The Louisville & Nashville Railroad Co. is now extending its Nashville, Florence and Sheffield division, which will be com-

pleted to Sheffield before the close of the year 1887. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the best combined river and railroad transportation center in the South.

Every merchant and every established manufacturing enterprise is doing a profitable business. More are needed. For

ALFRED H. MOSES, Vice-Prest. and Manager

Sheffield Land, Iron & Coal Co., - Sheffield, Ala.

Tuskaloosa, Ala.

* HLABAMA'S ПАТИКАГ ВІТТВИКСН. *---

A Railroad & River Town of 6,000 Inhabitants, in the Coal, Iron & Timber District.

Healthful Location. Salubrious Climate. School Facilities Unequaled by any other town in the South.

- + SITUATEDION +

Queen & Crescent

TRUNK LINE,

Warrior Coal Field

AND ON THE

WARRIOR RIVER.

Only Navigable River touching the

Alabama Mineral Field.

Eight Months Navigation. Being Surveyed now to be opened all the year round.

All Water Navigation to

MOBILE *

AND THE

Entire Gulf and Atlantic Coasts.

THE

-«Tuskaloosa Northern Railroad»-

Is now under construction into the

MINERAL of TIMBER FIELDS.

O-THE-O

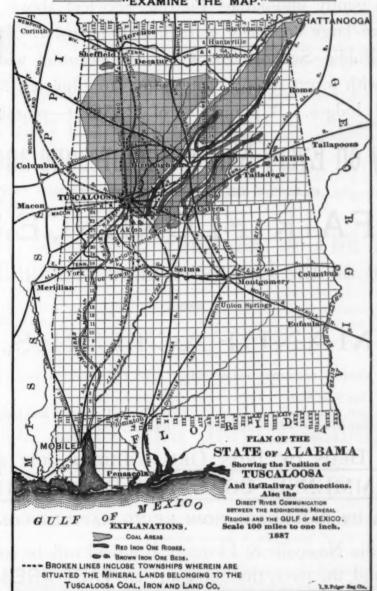
Macon & Buskaloosa Railroad

Will soon be building into the

COTTON REGION OF MISSISSIPPI.

Fine Farming Region

Around and Below the City.



Superior Inducements

* ADVANTAGES *

Manufactories Consuming

WOOD, *
IRON,
COTTON.

FINE GOKING GOAL

In workable voins near city, fully tested.

≪The Fire Clay

Existing in inexhaustible quantities, has been practically tested and pronounced

The Best yet Discovered in the South.

Street Car and Dummy Lines
NOW BUILDING.

→ Water Works and Electric Lights ← TO BE PUT IN AT ONCE.

COTTON MILL

In Successful Operation.

ALSO

LIARGE BRICK WORKS

Manufacturers Seeking Locations in the South have here

THE GOLDEN OPPORTUNITY.

Many have availed themselves of it, but such is the wonderful richness of the resources of this section that there is

ROOM FOR ALL

THE Tuskaloosa Coal, Iron & Land Co.,

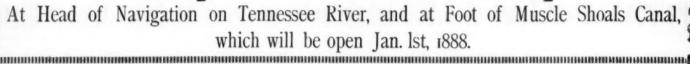
Owning 4,600 acres of city and suburban property, and 40,000 acres of mineral and timber lands, offers liberal inducements to manufacturers to locate at Tuskaloosa, Nature's City, and invites correspondence and the fullest investigation of its claims. Address

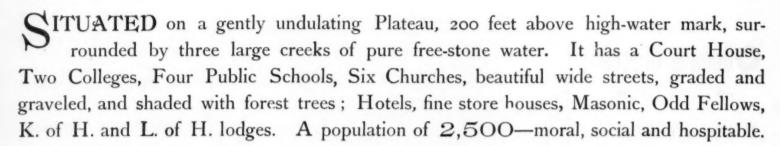
W. C. JEMISON,

President Tuskaloosa Coal, Iron & Land Co.,

TUSKALOOSA, ALA.

County Seat of Lauderdale County.





The Scenery on Every Side is Picturesque and Beautiful.

SO MUCH SO THAT IT IS CALLED BY VISITORS

FAIR FLORENCE."

There is no Place on the Continent more Healthful and Salubrious.

MANUFACTURES.

Within the last six months numerous manufactures have been located here, among the number:

Five Large Blast Furnaces. One Rolling Mill, Three Planing Mills,

One Saw Mill, One Flour Mill, One Wooden-Ware Factory.

One Cotton Mill, One Cotton Compress and Ice Factory.

Two Brick Machines and Three Hand-Brick Yards.

There are Vast Beds of Iron Ore within a few miles North and IMMENSE COAL FIELDS SOUTH

ACCESSIBLE BY RAILROADS NOW BEING RAPIDLY CONSTRUCTED.

By the 1st of January the Nashville & Florence Railroad will be completed, making three lines of railroad, and the river, thus opening up VAST AREAS OF TIMBER. IRON ORE, COAL, Marble, Limestone, Kaolin, Fire-Clay, and almost every kind of mineral and product.

THE LANDS IN THE SURROUNDING COUNTRY ARE FERTILE AND PRODUCTIVE

All kinds of Grain, Grasses and Fruits grow to perfection. Water Courses are numerous, and grazing for Cattle is abundant for eight months of the year.

Pamphlets and maps furnished on application to

rence Land, Mining & Manufacturing Company.

CADSDEN, ALA.

Reasons Why Capitalists and Manufacturers *

SHOULD MAKE GADSDEN THE FIELD OF THEIR OPERATIONS.

GADSDEN is situated in the midst of the RICHEST MINERAL SECTION OF ALABAMA; is on the West bank of the Coosa River. This stream furnishes Cheap Transportation to the Coal Fields and Iron Veins and Beds that are found all along its banks.

The Sand Mountain, Lookout and Coosa Coal Fields are at our very doors. This Coal Cokes equal to any Coal in the South.

The immense forests that cover the mountain and plains, and all along the Coosa and along the five railroads running to Gadsden, will for ages furnish as CHEAP CHARCOAL AS CAN BE HAD ANYWHERE ON THE CONTINENT. Limestone is found all around the city,—so Gadsden has in as great abundance, and at small cost, all descriptions of

- Rich Iron Ores, Fine Coking Coals, best class Charcoal, and Limestone for the quarrying. -

And, as an Iron center, no place in the favored State of Alabama can compare with Gadsden, when we consider our Ore and Fuel supply, our abundant Water, our unequaled Climate, UNINTERRUPTED HEALTH and FINE TRANSPORTATION FACILITIES. We have the most INVITING FIELD to all seeking locations, either for manufacturing iron in any of its varieties, or for investment in any other industries. Gadsden has to day in successful operation the

LARGEST CHARCOAL FURNACE IN THE STATE,

Has Four Large Saw Mills, with annual output of twenty million feet of the finest long-leaf Yellow Pine Lumber, three large Planing Mills, one Foundry and Machine Shop, two Gin and Flouring Mills, large Furniture, Sash and Door Factory, two Metallic Paint Mills, Ice Factory, a splendid system of Water Works, 80 pounds pressure, large steam Brick Works, and in course of construction a 100-ton Coke Furnace, being built by the Gadsden, Alabama, Furnace Co.; has stock subscribed for an additional Charcoal Furnace, has a National Bank, Cotton Compress, large Cotton Warehouse, handling 15,000 bales cotton, and a magnificent agricultural country all around us.

→ The Gadsden Land and Improvement Company <</p>

OWNS 3,000 LOTS,

And invites capitalists and manufacturers to come to Gadsden and see its advantages, pledging themselves to donate to any manufactory locating here, and working twenty-five men or more, GROUND UPON WHICH TO LOCATE PLANT, accessible to railroad or river. Our Railroads afford transportation facilities equal to any point in the South.

The Rome & Decatur gives close connections with the East Tennessee, Virginia & Georgia and Louisville & Nashville systems, the Anniston & Cincinnati with East Tennessee, Virginia & Georgia and Richmond & Danville, also the Alabama Great Southern Railroad; the Tennessee & Coosa Railroad with Alabama Great Southern, also the Tennessee River at Guntersville and the Central Railroad, when built, from Casselton to Decatur, making us on the short line from Kansas City and the West to Atlanta and the South Atlantic Coast.

Lots are Sold on the Most Favorable Terms:

One-third CASH, balance in one and two years.

We have a population of over 4,000, good Schools, and Churches of all denominations; splendid system of Electric Lights, Telephone Communication over the city, also to Rome, Ga. Boats run regularly the year round on the Coosa, carrying U. S. mail and freights from this point to Rome, Ga., a distance by water of 154 miles.

FOR FURTHER PARTICULARS, ADDRESS SECRETARY OF

The Gadsden Land and Improvement Co., -- Gadsden, Ala.

INISTON

The Model City of the South."

HERE is no healthier or more charming place of residence in America than Anniston; built on the slope of one of the highest of the chain of the Blue Ridge in Alabama, it commands scenery that is unapproachable in the State. Nature could not have formed a more beautiful place for man to build a city or given greater natural advantages. The natural drainage is most thorough and complete, while in addition the city is preparing a system of underground sewerage. A more delightful and invigorating climate cannot be found anywhere: mild in winter, cool in summer, a thousand feet above the Gulf, with the high and broken chain, range after range in the east, Blue Mountain in the north, Coldwater Mountain in the southwest, make Anniston the coolest, healthiest and most attractive of any city in the South. It has the richest agricultural country surrounding and tributary to it in the State, to support a manufacturing and mercantile population. The mountain sides will grow the grape and every kind of large and small fruit to perfection, and the valleys every product of diversified farming. It is in the heart of the richest mineral district of the South, and commands the great fields of brown hematite ores on which the great and successful manufacture of iron must in the end depend for quality and profit in every branch of most skillful and best manufactures of iron and steel. It has tributary to it the best and most extensive pine forests in North Alabama, that are reached by roads owned and controlled by Anniston citizens, while it has secured to its industries the very best coal mines and coking coal in Alabama. There is no city in America, in proportion to population, that has the manufactures of Anniston, or employs as many North Alabama, that are reached by roads owned and controlled by Anniston citizens, while it has secured to its industries the very best coal mines and coking coal in Alabama. There is no city in America, in proportion to population, that has the manufactures of Anniston, or employs as many working men, or does a larger mercantile business. The industries already in full and profitable operation in Anniston are the two Woodstock Furnaces producing six hundred tons of Standard Car Wheel and Malleable Iron per week, and the two Clifton Furnaces, tributary to Anniston, producing nearly as much more. The Car Works are fully employed turning out forty cars per week, and are introducing new machinery and larger engines to increase their capacity to twenty cars per day. The Rolling Mill and Car Wheel Foundry and Steam Forgs are among the largest in the South, of a capacity of two hundred wheels, a consumption of 120,000 pounds of metal per day, exclusive of the Rolling Mill and Steam Forgs. These works are being enlarged to meet the increasing demands upon them. The Cotton Factory is one of the largest in the South, containing 11,700 spindles, and is running to its full capacity, while the foundry of Murray & Stevenson, and machine shop of Pindar & Co., and planing mills of Miller & Smith and Farrar & Co. employ a large number of men and are crowded with work. The new industries that are now under way and provided for will within the next twelve months Add Four Thousand Additional Working Men to Anniston's Population Two of the Largest Iron Furnaces in the South, capable of producing two thousand tons of iron per week, are progressing rapidly, and one of the Largest and most complete Pipe Foundries in the world for the production of Gas and Water Pipe is under construction,—it will employ nine hundred men.



NOBLE STREET-ANNISTON.

The Steel Bloomery, for the production of Steel Blooms, is nearly completed, and the Fire-Brick Works of Taylor & Sons are ready for operation. The Ninety-Inch Morse Cotton Compress, with its warehouses, will be ready to receive the coming crop. Forty thousand bales, it is estimated, will be secured to Anniston from the territory that its system of railroads have opened up. The completion of the Anniston & Cincinnati Railroad during the present year, that will be owned and controlled by Anniston's citizens, opens up new territory and forms a New and Shorter Grand Trunk Line to Cincinnati and the great Northwest, and to the Southwest via New Orleans and Shreveport.

It is only the profits of business and labor that can add to the wealth of a community, add to or maintain the value of real estate, and add to the prosperity of its people. Having this in view, every industry and business in Anniston is established on a profitable basis. All its merchants are doing a large and profitable business, far larger than they prepared for or anticipated; it is the same with the manufacturers, while not a dollar of debt has been created, either by issue of a bond or placing of a mortgage on any of its old or new industries, leaving their earnings free from fixed charges that must be paid in times of depression as well as of prosperity. To the investor, either in business, manufacturing or real estate, nowhere else are presented opportunities as asfe, secure and certain as at Anniston, or where they can rest on as healthy and solid foundation. It has trunk line railroad communication with all parts of the United States, and freight rates with the most favored of Southern cities. Two lines of railroads are owned and controlled in the interest of Anniston by its own citizens. It has the best system of Works, with the purest well water from three hundred feet below the surface, drawn from white quartz sand and gravel, and distributed through the city, with a pressure of 100 pounds to the inch, from a reservoir always full, prote

NNISTOR

***CONSTRUCTION DEPARTMENT.

E PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

Anniston.—There are prospects of another fire-brick works being started.

Anniston.—It is reported that parties are figuring on the establishment of works for manufacturing railroad switches, frogs, &c. If anything be done, the Anniston City Land Co. can give information.

Anniston,—Farrar & Gatchel will start the manufacture of brick from furnace slag.

Anniston.—W. L. Hill, previously reported as contemplating erecting a three-story brick building on Noble street, has decided to build at once. The upper part will be used as a hotel.

Anniston.—It is stated that Tyson & Jones will probably move their carriage works from Carthage, N. C., to Anniston.

Anniston.—It is reported that Walter R. Burgess, of Pittsburgh, Pa., will make efforts to organize a company to manufacture glass ware, crockery, &c.

Arbacoochee,—T. P. Doiler, of Nashville, Tenn., will probably open a gold mine near Arbacoochee.

Auburn — The contract to erect the laboratory for the Agricultural and Mechanical College, previously reported, has been awarded to Floyd & Stevens, of Opelika, at \$11,900 Bids for erecting the main building will shortly be wanted.

Bessemer.—The Louisville & Nashville Railroad Co, have plans prepared for a depot,

Birmingham.—A. E. Burke, of New Orleans, La., and others, previously reported as to develop the Cross gold mine, near Tallapoosa, Ga., have organized the Camille Gold Mining Co., capital stock \$1,500,000. J. N. Carpenter, of Natchez, Miss., is president; W. P. Pinckard, Birmingham, vice-president; and A. E. Shaw, Natchez, secretary and treasurer. They have, it is said, bought \$100,000 of machinery.

Birmingham.—The Thomas Iron Co. have opened a new mine at Grace's Gap.

Birmingham,—The Birmingham Tannery & Manufacturing Co. contemplate erecting an abattoir.

Birmingham.—The Gate City Land Co contemplate building a railroad from Gate City to Birmingham. Estimates have been prepared.

Birmingham.—It is reported that, the Kansas City, Memphis & Birmingham Railroad Co. will establish large machine shops.

Birmingham.—The Birmingham Union Railway Co. have asked for permit to build a dummy line along First avenue.

Birmingham.—It is reported that plans are being prepared for a chain factory.

Birmingham.—The Electro-Libration Co. has, it is stated, been chartered by John N. Webb and others.

Blountsville.—The name of the company reported last week as being formed to build a dummy railroad to Bangor is the Blountsville, Louisville & Nashville Dummy Railroad Co. F. N. Hudson is president, and A. D. Howell, secretary. The road will be about 12 miles long.

Bridgeport.—John H. Anderson, reported last week as erecting a band saw mill, will put in machinery to manufacture lumber.

Calera—The capital stock of the spoke and handle factory reported last week to be built will be \$20,000. The South Calera Land Co. can give particulars.

Decatur.—E. S. Johnson will erect a brick building to cost \$6,500.

Gadsden.—Pogue & Herzberg have added a planing mill to their saw mill.

Jackson.—Bids for erecting a college to cost about \$5,000 will be received until September 22 by L. D. Watson.

Jasper.—It is rumored that a large number of coal mines will be opened soon.

Mobile.—The Alabama Terminal Railway Co., J. W. Woolfolk, 7 Nassau street, New York, president, have, it is said, the contract to build the Alabama Midland Railroad. Total length is about 170 miles.

Notasulga.—A steam grist mill has been erected by Shener & Lithgo.

Riverside.—The Riverside Land & Lumber Co. will build a lath mill with a capacity of 75,000 per day. Want machinery.

Selma.—The Birmingham, New Orleans & Selma Railroad Co, will hold a meeting October 10 to consider increasing capital stock to \$1,000,000.

Siluria,—The lime works of C. G. Wagner, reported last week as burned, are being rebuilt,

Talladega.—A. C. Skelton will probably start a mill near Talladega.

Troy.—A company has been formed to build a telegraph line along the Alabama Midland Railroad. E. H. Bashinky can give particulars.

Tuskaloosa.—E. P. Cockburn and Arthur Laycock, reported last week as to start a mattress factory, have organized as the Tuskaloosa Mattress Co.

Tuskaloosa. — The Southern Suspender Factory has been started by T. Block.

ARKANSAN.

Alexander —August Gachot, L. J. Gachot and Charles Ettenie are opening mines on the property of S. P. Lee.

Boydsville.—Mr. Johns will move his flour mill to Boydsville and add a circular saw mill.

Cleveland.—H. M. Howser & Co. will erect a warehouse 80x120 feet.

Greenville,—Carrington & Noble are, it is reported, rebuilding their mill and gin, burned last year.

Hot Springs —The Blue Mountain Gold & Silver Mining Co. has been chartered with George J. Lawrence as president; William H. Martin, secretary, and W. H. Hockersmith, treasurer. The authorized capital stock is \$3,000,000.

Lilly.—C. E. Leiendecker will at once rebuild his saw mill, reported last week as wrecked by an explosion. The daily capacity will be 20 M feet.

Little Rock.—C. F. Fischer has the contract to erect a new church for the German Lutheran Church. It will be 60x100 feet, with a spire 170 feet high.

Mammoth Spring.—The Mammoth Spring Improvement & Water Power Co. have let the contract to build the large stone dam, lately reported, to Hiedlebury & Co., of Pleasanton, Kan. It will cost about \$18,000.

Morrillton.—It is reported that W. E. Case, of Newcomerstown, O., will purchase iron ore lands with a view to developing and building an iron furnace.

Nashville,-Wamack & Short have erected a mill and cotton ginnery.

Pine Bluff.—St Luke's Epi-copal Church contemplate building new brick church.

Searcy.—The White County Transfer Co., capital stock \$5,000, has been organized with A. W. Yarnell as president, and J. M. Battle, secretary and treasurer.

Texarkana.—*It is reported that Mr. Hinckley has contracted to complete the Texarkana Northern Railroad to Fort Smith.

Wittsburg,—C, B. Slagle has been awarded the contract to build a courthouse for Cross county.

FLORIDA.

- Apalachicola.—A saw mill is reported to be erected.

Apopka — The Apopka, Clay Springs & Gulf Railroad Co. is being formed. The capital stock will probably be \$300,000.

Apopka.—The Salem Iron Works, of Salem, N. C., will start a branch foundry and machine shop.

Cedar Key.—The American Refrigerating & Construction Co., of Harrisburg, Pa., will erect the ice factory referred to last week. The daily capacity will be ten tons.

Jacksonville.—The Harwood Land Co. has been organized with John H. Hubbell as president.

Jacksonville.—J. E. Merrill & Bro. have asked for permit to erect a one-story boiler and forge shop, 40x175 feet.

Leesburg.—A cigar factory will be started by Mr. Ornweg.

Oakland.—The Orange Belt Investment Co, have lately put some new machinery in their machine shops,

Ocala.—Mann Bros. and John Codero have purchased machinery for an electric light plant. Will use the Brush system.

Ocala.-A. E. Waterman will erect an electric light plant.

Okahumpka.—The Okahumpka & Riverside Land & Improvement Co. has been organized with J. F. Richmond as president; R. A. Green, vice-president; W. M. Bennett, secretary, and John Ellis, treasurer.

Palatka.—The street railroad, lately reported, will be built by the Palatka Street Railroad Co.

Pensacola.—The Pensacola Gulf Land & Development Co., capital stock \$500,000, has been organized with J. C. Petterson as president; S. N. Van Praag, secretary, and W. D'Alemberte, treasurer.

Seaside.—Parties from Omaha, Neb., will erect a hotel to cost \$15,000. C. T. Wall can probably give particulars.

St. Augustine.—The St. Augustine Improvement Co. are preparing to erect a large brick building for Mr. Messon.

Tampa.—Water works and an electric light plant will probably be erected. The mayor can give information.

Tavares.—It is reported that arrangements are being made to extend the Blue Spring, Orange City & Atlantic Railroad to Tavares.

Waldo —A ten-ton ice factory and a cold storage warehouse will be erected by the American Refrigerating & Construction Co., of Harrisburg, Pa.

GEORGIA.

Americus.—All bids for building the water works previously reported have been rejected, and the city will probably build the works.

Atlanta,—A bill has been introduced in the legislature to incorporate the Jackson & Indian Springs Railroad,

Augusta.—Machine shops will be established by the Augusta & Chattanooga Railroad Co. Banning —U. B. Wilkinson will put about \$4 500 of new machinery in his paper mill to increase capacity.

Blythe.—J. E. Carswell is rebuilding his gin, reported last week as burned.

Butler.—E. B. Waters & Co. have the contract to build the bridges and trestles on the Georgia Southern & Florida Railroad; also the contract to furnish ties.

Cedartown.—The Dugar Engine & Rod Co., capital stock \$50,000, has been organized with A. G. West as president; J. O. Hardwick, vice-president; J. R. Barber, secretary and treasurer, and D. H. Dugar, manager. Will soon build works to manufacture connecting rods and journals, automatic engines, &c.

Columbus —The Columbus Compress Co. have purchased two hoisting engines, and are building a tramway.

Conyers -The Conyers Oil & Fertilizer Co. will improve their mill.

Conyers.—Efforts are being made to build a railroad to granite lands about 4 miles from Conyers. If the road is built several quarries will be opened and developed.

Dahlonega.—Charles Davis and others will develop iron ore mines and probably build a railroad.

Dahlonega.—S. S. Smith has bought the Adams mine, in Lumpkin county, and will erect a stamp mill.

Foster Mills,—W. G. Foster & Bro. have lately added new machinery to their flour mill.

Gainesville.—G. P. Boone & Bro, have organized a stock company to start the furniture factory reported last week as projected,

Griffin.—Efforts are being made to organize a company to build a large totton factory.

High Shoals.—The New High Shoals Manufacturing Co. are, it is stated, putting additional machinery in their cotton mill.

Holton — T. J. Carling, H. R. Brown and S. B. Price, of Macon, are probably interested in the company lately reported as to develop stone quarries.

Holton.—A steam grist mill and ginnery and a fertilizer factory will be erected by Myrick & Bowman.

Lincolnton.—Hollenshead Bros. & Wilkes are adding new machinery to their saw mill.

Macon.—The Consumers' Gas Co., previously reported, will probably begin work on their plant October 15.

Rome.—A new pump has been purchased for the Rome water works.

Savannah.—The Ocean Steamahip Co. have contracted for two new piers, each 200x500 feet, Will make other extensive improvements.

Thomasville.—Eaves & Chase have been awarded the contract to improve the courthouse at a cost of \$10,578.

Washington.—C. D. Robertson has erected a ginnery.

Washington.—Sims & Pharr contemplate erecting a grist mill.

KENTUCKY.

Barren Fork.—The Barren Fork Mining & Coal Co. will replace their engine-house and hoisting machinery reported in this issue as burned.

Broadhead.—A saw mill will be built by J. W. Tate.

Covington. — Emanuel H. Austerlitz, George H. Beaman and Phillip Goldamith have chartered the Covington Hide & Leather Co., capital stock \$40,000.

Henderson.-The Henderson Gas Co. are making some improvements to their gas-

Hopkinsville.-A mattress factory has been started by A. W. Pyle.

Lewisport.-T. M. Blanford has erected the planing mill previously reported.

Louisville.-The Citizens' Electric Light Co. will put in their plant immediately, and have it in operation about October 10.

Louisville.-The Bowles Natural Gas Co. previously reported, will sink about 5 wells whether successful in finding gas or not.

Louisville.-The Parkland Hills Hotel & Amusement Co., previously reported, have selected a site for their hotel and cottages.

Louisville.-The Green River Natural Gas & Mining Co. has been organized with James F. Callahan as president, and Charles Warren, secretary and treasurer.

Louisville.-Samuel Castleman, H. W. Frankel, S. E. Edmunds, A. E. Richards, Nathan F. Block and others have chartered the Enterprise Natural Gas Co., capital stock \$1,000,000.

Marion.-A large hotel is to be built at the Crittenden Sulphur Springs near Marion. R. C. Walker can give information.

Marion .- A roller flour mill is being built. R. C. Walker can give information.

Marion .- A broom factory has been started.

New Hope.-The Falls City Natural Gas Co., of Louisville, previously reported, will sink a well.

Owensboro .- F. T. Gunther, John Wandling, E. P. Millett, J. N. Courtney and others are interested in the company reported last week as being formed to sell and manufactufe the Bennett gas economizer. The capital stock is to be \$100,000.

Paducah.-The Paducah Coal, Iron & Land Co., previously reported, are inspecing their mineral lands with a view to developing at once.

Pike County .- H. S. Welton, president Milton Furnace & Coal Co., Wellston, O., is examing coking coal lands with a view to purchasing.

Somerset.-F. P. Curtis will rebuild his saw and stave mill reported last week as

Winchester .- I. L. Frazier and W. A. Attersall have been appointed a committee to receive proposals for building water works.

Winchester .- T. G. Stuart & Co. have been granted a franchise to build street railroad.

Winchester .- Benjamin Gardner has leased the planing mill of J. W. Gardner & Bro , and will put in additional machinery.

LOUISIANA.

Alexandria.-Ingram & Olin, previously reported as building a planing mill and a tank factory, will add a flooring machine about January 1, and stave machinery as soon as it can be made.

Farmerville.-William & James Roun, P. K. Smith and W. S. Pickens will each erect a gin.

New Orleans,-The Louisiana Electric Light & Power Co. have made a proposition to erect an incandescent plant at the Charity Hospital.

New Orleans .- The Standard Guano & Chemical Manufacturing Co., previously reported, will increase the output of their works from 50 per cent. to 75 per cent.

New Orleans .- The People's Brewing Co. lately reported as chartered, have purchased a site for a large brewery. E. Ehrensing is

Shreveport.-A glue factory and fertilizer works, three stories, 80x90 feet, will be erected by A. S. Toombs.

Shreveport.—A company has been formed to start a steam laundry. Have purchased machinery.

Shreveport.-The Monroe Ice Co., of Monroe, and others will form a company to build an ice factory and a cold storage warehouse. Have bought a site and will bore an artesian well at once.

Shreveport.-George Maas will start a factory to manufacture buckets, kegs, &c.

MARYLAND

altimore.-William I. Daly will erect 8 three-story houses on Fulton avenue. James H. Gable will erect 7 three-story houses corner of Stockton and Tennett streets. George L. Dunkerly will erect 10 two-story houses on Falls alley.

Baltimore,-Charles H. Call s will erect 9 three-story brick houses corner of Fulton and Harlem avenues and 3 three-story brick houses on Harlem avenue.

Baltimore.-The Farmers' & Merchants' National Bank will erect a new bank building corner South and Lombard streets. It will be about 70x100 feet.

Chestertown.-The Chestertown Straw Board Mill has been repaired and improved.

Frederick.-Broadbent & Bro., of Baltimore, contemplate establishing a soap factory.

Prospect.-Andrew Boyle has lately enlarged his canning establishment.

Washington, D. C .- The Catholics have selected Washington as the location for their proposed larg university. E. F. Baldwin, of Baltimore, has prepared plans.

MISSISSIPPI.

Charleston .- A shoe and saddle factory will, it is said, probably be established.

Lula.-It is reported that the Louisville, New Orleans & Texas Railroad Co. office, Memphis, Tenn..) will build a branch road from Lula to a point opposite Helena, Ark.

Natchez.-The Adams Manufacturing Co. have improved their cotton-seed oil mill and added new machinery, and have contracted for electric light machinery.

Natchez.-Lewis Petkovsek is erecting ood-working machinery.

Natchez.-The Lee Oil Works have been overhauled and improved.

NORTH CAROLINA.

Asheville.-The building reported last week as to be erected by Thomas D. Johnston will not be a hotel as stated.

Asheville.-The Asheville & Tennessee Railroad Co., previously reported as chartered, have organized by electing S. R. Kepler, president; Natt Atkinson, vice-president, and J. W. Courtland, secretary and treasurer.

Burgaw.-The contract to erect the jail. previously reported, has been let to H. C. Black & Bros., of Fayetteville, at \$2,860. The Pauly Jail Building & Manufacturing Co, of St. Louis, Mo., have the contract for the cells at \$2,100.

Central Falls.-The Central Falls Manufacturing Co., reported last week as having enlarged their cotton factory, are now mak ing the additions, which consist of a dyehouse, 64 plaid looms, etc.

Concord.-A Brush electric light plant will be erected. J. M. Odell can give infor-

Conover.-The Conover Manufacturing Co., capital stock \$1,500, has been formed to manufacture sash, doors, blinds, etc.

Dalton.-A spoke and handle factory is to be erected shortly.

Durham.—The city has voted the \$100,000 subscription to the Durham & Northern Railroad, previously reported.

Durham .- E. J. Parrish, lately reported as to build a large tobacco warehouse, has let the contract to Linthicum & Bethell.

Gold Hill .- The Gold Hill Mining Co., of London, Eng., are, it is reported, raising money to put their mine in shape for permanent operation.

Granville County.-It is stated that the

eastern part of the county contemplate putting in a complete plant of mining machinery and furnaces.

Henderson - W. M. & C. Watkins will build a tobacco warehouse, 50x200 feet.

Henderson.-The city has voted a subscription to the Northern & Durham Rail-

King's Mountain .- Mr. Armstrong is deeloping an iron mine 5 miles from King's Mountain.

Montgomery County.-The name of the £200,000 company, lately reported as purchasing the Sam Christian gold mine and to spend a large sum in erecting pumping plant, etc., is the Sam Christian Gold Hydraulic, Limited, of London, Eng.

Monroe.-John Shute & Sons are erecting woolen mill, flour mill, grist mill and cotton ginnery.

Morganton. -The Morganton Land & Improvement Co., previously reported, are developing a manganese iron ore mine.

Mt. Airy.-A hotel is reported to be

Murphy .- The Cherokee Iron & Marble Co., capital stock \$500,000, has been formed to develop mineral lands near . Murphy. The company own about 1,400 acres. Ruffner, of Virginia, is president, and I. G. Gibbes, of Jacksonville, Fla., is interested.

New Berne - The wood pulp mill at Graywood has, it is reported, been enlarged.

New Berne.-W. B. Blades & Bro. have contracted for five dry kilns, and the New Berne Lumber Co. have contracted for four kilns.

Oxford.-The city has decided to issue the \$10,000 bonds to build the city hall and market-house reported last week. The mayor can give particulars.

Raleigh .- M. A. Parker is enlarging his prize factory.

Raleigh - Linscombe & Faison, lately reported as to build a prize factory, have commenced work. It will be four stories, 45x120 feet.

Raleigh.-F. L. Love has contracted to erect a large prize factory for Ivan M. Proctor. One or more other prize factories will probably be built.

Rutherfordton,-I. B. Morris and I. C. McFarland have recently commenced developing mines in Polk county.

Smith's Creek (P. O. at Kershaw) .- A grist mill and cotton ginnery are being erected by R. P. Midyette.

Stella.-The White Oak River Lumber Co. have contracted for three dry kilns.

Sunshide.-L. C. Daily will start a tan-

Thomasville .--It is reported that H. F. McCarty has sold his Standard mine to an Ohio party for \$50,000.

Warrenton.-Parties from Pennsylvania are preparing to develop a mica mine near Warrenton.

Wilmington. - The Wilmington Street Railway Co. will, it is stated, commence work on their road October 1.

SOUTH CAROLINA.

Charleston .- F. W. Wagener, George A. Wagener, James Simons, William M. Bird, H. Furchgott and others have incorporated a \$15,000 stock company to start a furniture factory, &c.

Charleston. -The East Shore Terminal Co., capital stock \$20,000, has been incorporated by William A. Courtenay, William E Huger, Samuel J. Pregnall, C. S. Gadsden, William H. Brawley and E. C. Williams, Jr. Will build a railroad.

Charleston,-A bill will be introduced in the next session of the legislature at Columbia to charter the Eastern Barnwell & Western Railroad, to extend from at or near mers of the copper mines in the north- Charles on to some point on the Savannah

river between Edgefield and Hampton coun ties. W. H. Dancan will be interested.

Cheraw.-A \$50,000 stock company has been formed to operate the Henshaw Iron Works, which are to be moved to Cheraw. W. A. Henshaw can give particulars.

Rock Hill.-The Rock Hill Cotton Factory is being repaired and new boilers are being put in

Sumter .- The proposition of the Maryland Electric Motor Manufacturing Co., Baltimore, Md., to erect an electric light plant, reported last week, has been accept-Will also build an electrical railroad.

Winnsboro.-The owners of the Winnsboro granite quarries are negotiating the formation of a \$100,000 stock company to more extensively develop the quarries.

TENNESSEE.

Bluff City .- A. F. Willey, of Grand Rapids, Mich., will, it is stated, build a lumber railroad.

Chattanooga.-The Chattanooga & Gum Log Mining Co. are testing their mineral lands in North Carolina.

Chattanooga.—It is rumored that the Winona Harvester Works, Winona, Minn., contemplate moving their plant to Chatta-

Chattanooga.-T. J. Lattner will organize a \$25,000 stock company to enlarge and operate his tack factory.

Chattanooga.-J. C. Vance, lately reported as purchasing the Chattanooga Cotton Factory, will enlarge it to about five times the present capacity and probably add machinery for manufacturing checks, jeans, &c.

Coal Creek.-The Black Diamond Coal Co. have opened a new mine. Surveys are being made for a branch railroad.

Fayetteville.-Lincoln county has voted a subscription of \$100,000 to the Cincinnati & Birmingham Railroad and \$100,000 to the Decatur, Chesapeake & New Orleans Railroad.

Greeneville.-The Greeneville Tobacco Manufacturing Co. are, it is stated, now building their factory previously reported.

-The Citizens' Gas Light Co. will, it is reported, erect an electric light plant.

A flour mill is to be erected Jonesboro soon. G. W. Bolinger can give particulars.

Kerrville.-Wilson & Jencks will erect a saw mill.

Knoxville.-The Hanging Rock Stove Co., of Ironton, O., previously reported as contemplating moving their stove foundry to some point in the South, have, it is said, decided to move to Knoxville. A new company will be formed.

Knoxville.-Charles Kurth has put pipecutting and threading machinery in his plumbing establishment.

Knexville.-A company has been formed to extensively develop marble quarries near Knoxville.

Knoxville,-M. J. Hatcher, of Macon. Ga., is negotiating for the establishment of a factory to manufacture his patent iron wagon, previously reported.

Knoxville.-The Unaka Soap Works have been chartered by Matthew McClung, William Simmonds, C. E. Lucky, S. B. Luttrell. and R. M. Rhea.

Lawrenceburg .- The Crescent Cotton Mill Manufacturing Co. will rebuild on a larger scale their factory reported last week burned.

Memphis .- Moore & Perkins are rebuilding their saw and planing mill reported last week as burned.

Nashville.-The name of the company reported last week as formed to build a railroad from the Cincinnati Railroad to the Cumberland river near Carthage is the East & West Railroad Co. C. E. James, Chattanoogs, is interested.

Nashville,-M. B. Pilcher will erect a four-story brick building to cost \$16,000.

Nashville,—The McGavock & Mt. Vernon Street Railroad Co. will build stables and car-sheds to cost \$22,000.

Tullahoma.—The board of directors of the Tullahoma & Hurricane Springs Hotel Co. have been authorized to issue \$30,000 of bonds to build the new hotels previously reported, and to improve their property.

TEXAS.

Brenham.— Gas works are again being agitated.

Coleman.—A stock company has been formed to erect a cotton ginnery.

Corsicana.—Bonds will probably be issued to build a sewerage system and for street improvements.

Dallas.—The State Farmers' Alliance will locate their headquarters at Dallas and erect a building to cost not less than \$20,000.

Dallas.—It is stated that a grain elevator with a capacity of from 500,000 to 1,000,000 bushels is to be built. Frank M. Cockrell can give information.

Dallas.—D. M. Clower will build the electrical railroad at the Texas State Fair & Dallas Exposition, previously reported.

Dallas,—The Dallas Terminal Railroad Co., previously reported, have asked for permit to build railroad.

Denison—The Denison Natural Gas & Mining Co., previously reported, have contracted to have a well bored.

Denison.—The Denison Crystal Ice Co. will increase the capacity of their ice factory from 15 to 30 tons daily.

Eddy.—An oil well will probably be bored by Mr. Erath.

Fort Worth.—It is reported that J. P. Hughes has contracted to grade the Fort Worth & Rio Grande Railroad from Granbury to Stephenville.

Gainesville.—The capital stock of the Gainesville Water Co. has been increased from \$10,000 to \$20,000.

Galveston,—The city will build a new market-house.

Galveston—The Galveston Bagging & Cordage Co, previously reported, will have their factory in operation about January. They will put in electric light machinery and will add a small cotton cloth factory to educate skilled labor with a view to supplementing the bagging factory with a \$1,000,000 cotton mill.

Galveston. — Fox Bros. have purchased and will add to their steam bakery machinery for manufacturing crackers.

Greenville,—Efforis are being made to have the Farmers' Alliance locate their flour mill, previously reported, at Greenville.

Honey Grove.—Porter & Worrell talk of moving their flour mill from Cisco to Honey Grove.

Kyle.—It is reported that a \$3,000 company has been formed to bore artesian wells. McKinney.—The Farmers' Alliance will build a mill.

Nacogdoches,—It is reported that J. B. Gonzalez, of New Orleans, La., has formed a \$100,000 company to develop mineral and oil lands in Nacogdoches and San Augus-

tine counties.

Nacogdoches.—The Hubbard City Oil & Mining Co. will bore for gas.

Nacogdoches. — Machinery has been bought to start a barrel factory, probably by the Palestine Mining & Petroleum Co, of Palestine

San Antonio.—The San Antonio Stock Yard Co, previously reported, are now building their yards.

San Saba - Parties are prospecting for coal lands.

Waxahachie — The Waxahachie Street Railway Co. has been chartered by Messrs, Dunlap, White, Strickland, Williams, Anderson, Lewis and others. The capital stock is \$25,000.

VIRGINIA.

Danville.—R. D. Flynn and others will establish a wagon factory. Have secured a site.

Fincastle — Efforts are still being made to start a can factory.

Franklin.—Clarence H. Clark, of Pailadelphia, Pa., has leased and will develop the Franklin Iron Mines.

Lynchburg.—A trunk factory is reported to be started.

Lynchburg.—John Kelly has received the contract to build two miles of the Lynchburg & Durham Railroad.

Marion.—Manganese iron ore mines near Marion are being developed by Mr. Fox, of Philadelphia. Pa.

Marion — Henry Hull has leased the Pugh and Williams manganese ore mine to Judge Hill, of Chicago, who will develop it on a large scale. Norfolk.—Nottingham & Wrenn are build-

ing an oyster packing house to be occupied Wright & Wills, of Boston, Mass. Norfolk.—The Baltimore Steam Packet

Co. will, it is said, make extensive improvements to their property on West Main street.

Portsmouth.—The Norfolk & Portsmouth Terminal Co., capital stock \$100,000, has been organized with William Green, of New York, as president, and Myers Spicer, of Brooklyn, N. Y., secretary and treasurer.

Pulaski City.—A stock company is being formed to build a hotel. General Imboden can give information.

Richmond.—The Manchester Railway & Improvement Co. and the Union Passenger Railway Co. have each asked for permit to build across Mayo's bridge.

Richmond.—The Richmond Coal Mining & Manufacturing Co. will issue bonds to carry on their mining and manufacturing operation.

Richmond.—J. H. Griffith & Co, have leased the cracker factory of Richard Adam and will manufacture cakes, crackers and fancy goods; also their own tin boxes. Will be known as the Old Dominion Cake & Cracker Works.

Richmond.—The Powhatan Coal Co, of London, Eng., have, it is said, bought out the Powhatan Coal Co., of Richmond, and will enlarge operations at their mines.

Roanoke.—H. H. Corsen, representing the Thompson-Houston Electric Co., of Boston. Mass., is negotiating for the erection of a plant.

Staunton. — M. Leiterman and A. D. Payne, of Charlottesville, have made a proposition to build a street railroad. J. Thompson Brown, of Richmond, will also make a proposition.

Tazewell C. H.-L. P. Evans, of Pottstown, Pa., has a sub-contract to construct part of the Clinch Valley Railroad.

WEST VIRGINIA.

Benwood.—It is rumored that the Riverside Iron Works contemplate erecting another furnace.

Bethany.—The Atlas Drilling Co. will sink a gas well near Bethany.

Huntington.—The Huntington Transfer Co. has been chartered by D. W. Emmons and others.

Ronceverte.—It is reported that slaughter houses, &c., to cost about \$20,000, will be erected.

St. Mary's.—W. N. Walton, Alexander Brewer, H. P. Locke, E. E. Walton and H. B. Walton have incorporated the Timber, Land & Mercantile Co. to deal in land, operate saw mills, &c. The capital stock is limited to \$25,000.

Wellsburg.—George Gibbon is sinking a gas well.

Cincinnati, Ohio.—Coleman & Reynolds are still negotiating for the removal of their horse-shoe works to some Southern city.

BURNED.

Atkins, Ark,- The planing mill of W. R. Pruitt.

Birmingham, Ala.—The Caldwell Printing Works; loss about \$50,000.

Camilla, Ga.—The gin of D. K. Butler, Collinaville, N. C.—The whiskey distillery of C. M. Feagan,

Dooly County, Ga.—The grist mill of John C. Fullington.

Flat Rock, Ky.—The mining machinery of the Barren Rock Mining & Coal Co.; loss \$10,000. Will be replaced.

Gaffney City, S. C.—The saw mill of W. H. Richardson.

Halfmoon, Texas.—The mill and gin of A. J. Lawrence.

Jacksonville, Fla.—The saw mill of T. N. Cashen, damaged by an explosion. Is being repaired.

Johnson City, Tenn.—The saw mill of J. W. Constable.

Johnston County, N. C.—The saw mill and gin of Charles Stephenson.

Lewis County, W. Va.—The saw mill of D. C. Mitchell.

Montgomery, Ala.—The steam mill and ginnery of John M. Anderson, two miles from Montgomery.

Mount Carmel, Als.—The steam mill and ginnery of James T. Giddens; loss \$3,000.

Piedmont, S. C.—The ginnery of Long & Stegall damaged by boiler explosion.

Poulan, Ga.—The saw mill of J. W. Price wrecked by a boiler explosion.

Rising Sun, Md.—The grist mill of James S. Addison, near Rising Sun; loss \$1,500.

Thomson, Ga.—The gin of J. W. Ellington.

Vicksburg, Miss.—The gin of Richard Middleton near Vicksburg.

Wetumpka, Ala.—The ginnery on the Bozeman plantation near Wetumpka.

Worth County, Ga.—The ginnery of J. E. Billups; loss \$2,250.

Will Rebuild Saw Mill.

Somerset, Kv., Sept. 8, 1887.

Editor Manufacturers' Record:

My saw mill was burned August 30. 1 will rebuild. F. P. Curtis,

Erecting A Saw Mill.

STEVENSON, ALA., Sept. 7, 1887.

Editor Manufacturers' Record:

We are now erecting a band mill at Bridgeport, Alabama, and expect to put in machinery for manufacturing our lumber, but have not fully decided what we will put in and how much. JNO. H ANDERSON.

To Build Machine Shops.

Augusta, Ga., Sept. 8, 1887. Editor Manufacturers' Record:

Machine shops, etc., of the Augusta & Chattanooga Railroad will be located at Chattanooga and at Augusta. Size, character and quantity of all shops to be extensive and for the use of an expected large business.

CLEMENT A. EVANS.

BIRMINGHAM, ALA, September 10, 1887. Editor Manufacturers' Record:

The Birmingham Union Stock Yard Co.
has been formed, but organization not yet
complete.

H. M. McNutt.

ATLANTA, Ga., September 8, 1887.

Editor Manufacturers' Record:

I have been developing some manganese and nickel property recently. The property is in Towns county, Ga., near the Clay county line in North Carolina, and 20 miles from Murphy, N. C. The property has shown up well both as to manganese and nickel.

J. D. Caldon.

MACHINERY WANTED.

(If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you with send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, &c.

Bone Mill.—G. M. Lore, Concord, N. C., wants to buy a small but strong mill for grinding raw bone.

Bridge.—The Board of Commissioners, Rome, Ga., will receive bids for the building of an iron bridge across the Oostanaula river.

Brick Machinery.—Moulthrop & Stevens, Decatur, Ala., want to purchase brick machines and dryers.

Creamery Machinery.—William T. Murray, McMinnville. Tenn., wants bids on creamery machinery.

Ice Machinery.—B. H. J. Ahrens, Wilmington, N. C., wants to purchase latest improved ice machinery of about 15 tons capacity.

Iron Bridge,—The Commissioners' Court of Goliad county will receive proposals until October 20 for building a wrought iron bridge across the San Antonio river, near Goliad.

Iron Bridges.—Bids for building 12 iron bridges in Ellis county, to cost about \$30,000, will be received by the Commissioners' Court, at Waxahachie, Texas.

Iron Pipe.—Charles H. Lutz, Owensboro, Fia., wants to purchase wrought iron pipes 1, 1 1/4 and 2 inches in diameter.

Knitting Machinery.—C. A. Rinker, Vinton, Iowa, wants the address of manufacturers of hosiery knitting machinery.

Lath Machinery, &c.—The Riverside Land & Lumber Co., Riverside, Ala., wants to buy lath machinery and engine and boilers.

Locomotive.—G. M. Serpell, Norfolk, Va., wants to purchase a narrow guage (3½ feet) locomotive about 10 to 15 tons weight, for logging railroad.

Mattress Machinery. — The Tuskaloosa Mattress Co.. Tuskaloosa, Ala., want to buy mattress-making machinery.

Spoke and Handle Machinery.—The address of manufacturers of such machinery is wanted by Bernard Gaston, Jacksonville, Ala.

Stump Pullers.—Daniel G. Brantly, Cobbville, Ga., wants to purchase machinery for pulling stumps.

Wafer Irons.—W. W. Seay, Rome, Ga., wants the address of manufacturers of wafer irons.

Water Works —Proposals for building water works at Winchester, Ky., will be received by W. A. Attersall and J. L. Frasier. Water Works.—The city of Weatherford,

Water Works.—The city of Weatherford, Texas, wants to contract with some company to build water works. Matt C. Cameron will give particulars.

Ice Machinery Wanted.

WILMINGTON, N. C., Sept. 8, 1887.

Editor Manufacturers' Record:

My intention is to build an lee factory. I have purchased the site and expect to commence building some time this winter. I want the names of some of the best machines with all the latest improvements, and by whom manufactured, &c. I expect to erect one with the capacity of to or 15 tons per day.

B. H. J. AHRENA.

Will Build Electrical Railway.

DALIAS, TEX., Sept. 2, 1887.

Editor Manufacturers' Record.

Final arrangements have been made for the construction of an electrical railway on our fair grounds to be in operation by the opening of our fair and exposition October 20th next. The name of the party who intends to build it is D. M. Clower, of this city.

Sydney Smith.

Will Build Lath Mill

RIVERSIDE, ALA, September 9, 1887. Editor Manufacturers' Record :

We are building 15 new houses, and we are also going to build a lath mill of 75,000 per day capacity, and will need lath machinery, boilers and engine. There is also a large and complete brick works to be erected at this place by Morris, Isen & Co. at once. RIVERSIDE LAND & LUMBER CO.

Refitting Flour Mill.

OLMSTEAD, KY., September 10, 1887. Editor Manufacturers' Record:

We are putting in a complete line of new machinery, furnished by the Case Manufacturing Co., of Columbus, Ohio. When completed we will have a full roller mill of 50 W. L. BOYD & SON. barrels capacity.

Contemplate Building Another Cotton Mill.

GRIFFIN, GA., September 10, 1887. Editor Manufacturers' Record:

We are thinking of building another cotton mill here next spring.

GRIFFIN MANUFACTURING CO., M. J. KINCAID, President.

Adding New Machinery.

COLUMBUS, GA., September 10, 1887. Editor Manufacturers' Record:

We are building a 350 horse-power engine for our own works; are also adding \$3,000 of wood-working machinery for the manufacture of sash, doors and blinds. We are prepared to make coils up to 1,000 feet in length of I inch pipe.

COLUMBUS IRON WORKS CO.

Will Rebuild Saw Mill.

LILLEY, ARK., September 7, 1887. Editor Manufacturers' Record:

I will rebuild at once and put in a mill with a capacity of 20,000 feet per day.

C. E LEIENDECKER.

RALEIGH, N. C., September 12, 1887. Editor Manufacturers' Record:

A tobacco prize house is being built for me by Mr. T. L. Love, of this place.

I. M. PROCTOR & Co.

Additional Machinery.

CENTRAL FALLS, N. C., Sept. 10, 1887. Editor Manufacturers' Record :

The Central Manufacturing Co. are adding an engine and boilers, a dye house and CENTRAL MFG. Co. 64 looms (plaid).

Rebuilding Lime Works.

SILURIA, ALA., September 10, 1887. Editor Manufacturers' Record:

Our lime works were burnt on Friday night, 2d inst.; cause of fire not ascertained positively. We are rebuilding and hope, in a very short time, to be at work again.

C. G. WAGNER.

RUTHERFORDTON, N. C., Sept. o. 1887. Editor Manufacturers' Record :

Several mines will soon be opened in Rutherford county. The gold mines of this county are acknowledged to be the most famous in the State. Capt. J. B. Morris and J. C. McFarland have recently commenced mining operations in Polk county with very flattering prospects. Geo. Lute exhibited a very rich specimen of gold ore last week, taken up from Rev. C. B. Justice's land near WM. C. IVY.

JOHNSON CITY, TENN., Sept. 5, 1887. Editor Manufacturers' Record :

We are enlarging our planing mill. CLOID BROS. & CLARK.

To Manufacture Engines.

CEDARTOWN, GA, Sept. 12, 1887. Editor Manufacturers' Reco

The Dugar Engine & Rod Co. has been rganized, with a working capital of \$50,000. The officers are: A. G. West, president; J. O. Hardwick, vice-president; J. R. Barber, secretary and treasurer, and D. H. Dugar, manager. The company will soon apply for a charter. The works will be located upon the east bank of Cedar creek, near the corporate limits of Cedartown. The object of the company will be the manufacture of an improved connecting rod and journals for locomotive and stationary engines, also an improved automatic engine, all invented and recently patented by D. H. Dugar, of New York. He has just completed at Anniston, Ala., an engine with all his late improve ments attached, which engine is now running the electric light plant at the above place and is giving entire satisfaction. A bill is now pending before the Georgia legislature to incorporate "The Ore Belt Railroad Co." to be built from Cedartown to Cave Spring, a distance of about ten miles. The road will run through some of the richest iron and manganese fields in the South, and will become a splendid feeder to the E. T. Va-& Ga. R. R.

CRDARTOWN LAND & IMP. CO.

Tank Factory & Planing Mill. ALEXANDRIA, LA., Sept. 9, 1887. Editor Manufacturers' Record:

We have erected a 70x80 feet tank factory and planing mill. Nearly all our machinery is in. We are running what we have, using a 35 horse power Westinghouse engine and boiler. Our facilities for building railroad tanks are not surpassed in the United States. Will put in a fast feed flooring machine about January 1st, 1888. and a new machine for making cistern staves soon as it can be made.

INGMAN & OLIN.

Will Double Capacity.

KNOXVILLE, TENN., Sept. 5, 1887. Editor Manufacturers' Record :

We have incorporated and purpose doubling our capacity at an early date.

KNOXVILLE BUGGY WORKS Co.

GRAHAM'S FORGE, VA, Sept. 7, 1887. Editor Manufacturers' Record:
The Chambers Valley & New River Rail-

road Co. was organized a few weeks ago, electing Geo. T. Mills president. The vote of this county will be taken October 6 to subscribe \$100,000 county bonds to the road. If this is carried the road will be built at once. Ample capital has been secured. This line will connect the Yadkin Valley and the Cripple Creek roads; will be some 45 miles in length.

J. W. ROBINSON.

SOUTH PITTSBURGH, TENN., Sept. 7, 1887. Editor Manufacturers' Record:

A charter for a water company has been obtained, the incorporators being Nashville & South Pittsburgh parties. As soon as the town shall have been incorporated, water works will be built. JAS. L. GAINES.

FORT WORTH. TEX., Sept. 7, 1887. Editor Manufacturers' Record:

We have received the contract for an iron dome for the capitol at Austin, Texas.

J. T. BURT & Co.

SHELBY, N. C., Sept. 7, 1887. Editor Manufacturers' Record:

We are putting in our cotton mill the Brush electric lights-75 lamps.

MILLER, BLANTIN & CATES.

JACKSONVILLE, GA., Sept. 3, 1887. Editor Manufacturers' Record :

We are building gin and grist mill. WILLCOX & DOPSON.

Bessemer Ores in Texas.

MILWAUKEE, WIS., Sept. 10, 1887. Editor Manutacturers' Kee

I have secured, with others in Llano and Mason counties, Texas, the largest body of fine Bessemer ores and manganese I think that has ever been found on the Continent. The deposits are immense, and I expect in very short time to see it one of the largest ore producing districts on the Continent. I have just started my men who take charge of the diamond drills, and shall develop the different properties by cross-cutting the lens of ore at a depth of 4, 8 and 13 hundred feet. One of the drills we shipped on the 26th of last month; the other, the larger of the two, will be shipped within a very few days.

George M. Wakefield.

New Machinery.

FOSTER'S MILLS, GA., Sept. 7, 1887. Editor Manufacturers' Record:

W. G. Foster & Bro. have lately added new machinery to their flouring mill at R. L. FOSTER. this place.

WINNSBORO, S. C., Sept. 10, 1887. Editor Manufacturers' Record:

The owners of the Winnsboro quarry are now negotiating for the formation of a company with a capital of \$100,000, and it is expected that the scheme will meet with success. The name of the quarries is the Winnsboro Granite Quarries. They have to a certain extent been developed, but the supply is inexhaustible, and the owners wish to further develop them and make a big thing of it. The granite has been pronounced by experts the finest in the United States

THE NEWS AND HERALD.

New Orleans, La., Sept. 9th, 1887.

Editor Manufacturers' Record:
We formed the Standard Guano & Chemical Manufacturing Co., paid up capital \$200,000, and succeed the Sterns Fertilizer & Chemical Manufacturing Co. having purchased their plant, good will, trade marks, &c. We intend increasing our output from 50 to 75 per cent. this coming season. The presidents of the four leading banks of this city are interested as JOHN S. RAINEY. stock-holders.

DALLAS, TEXAS, Sept. 9, 1887. Editor Manufacturers' Record:

The contract was closed yesterday between the city and the Farmers' State Alliance, by which the headquarters of that large organization (200,000 members) and also their cotton, grain and produce exchange were located in this city for the period of ten years, the inducement being a bonus of \$10,000 cash given them by the city, and also a block of land centrally located, corner Wood and Market streets, on which they bind themselves to erect a building to cost not less than \$20,000 by the 1st of January, 1888.

RUST & FLOOD.

To Build a Furniture Factory.

GAINESVILLE, GA., Sept 10, 1887, Editor Manufacturers' Record :

We are dealers in furniture and have about organized a stock company to build a factory, which, if organized, will begin on or about January 1st, 1888. Cannot state posi-G. P. BOONE & BRO.

FLAT ROCK, KY., Sept. 10, 1887. Editor Manufacturers' Record.

The entire Barren Fork Mining & Coal Co.'s houses and hoisting machinery burned on 6th inst. Damage five to ten thousand dollars; fairly covered by insurance. Have already began to rebuild, and hope to be ready to ship coal in thirty or forty days.

FELIX L. BOSWORTH, Supt.

Can Such Things Be?

In Eastern Kentucky companies are now preparing to open coke fields and build furnaces where Bessemer ore can be made at \$8 25 per ton. The magnetic ore of the Marquette region is now hauled about 600 miles to Cleveland, where it is sold at from \$6 50 to \$8 per ton. It means a revolution steel-making, so grave that those who are interested will not be prepared to believe it, to say that a better quality of the same ore can be mined at Cranberry, near the coke fields of Eastern Kentucky, at 40 cents a ton. The difference of about \$6 per ton in the cost of the manufacture of pig steel is so great as to make the opening of these mines and the utilizing of their products on the spot virtually a new era in metal-working.

Those capitalists who have everything invested in iron and steel works will be compelled sooner or later to take notice of the almost magical changes that are impending in their business. It is a secret pretty well guarded that half a dozen of the largest, wealthiest and most enterprising iron and steel makers of England and Germany have been for months in this new El Dorado of industry. They have bought immense tracts of land. Already the sites of new manufacturing cities have been decided upon. Boston, Philadelphia and Pittsburgh have not been left in this scramble for riches, and capitalists from those places have bought largely. Twenty furnaces are already under contract for im-mediate construction, and in less than five years plants representing the capital of many of the largest concerns in the world will be in operation in the Cumberland valley.

The first railroad to enter this region is a branch of the Louisville & Nashville system, and will give to Louisville the first connection. Two other roads are being pushed forward as rapidly as possible in the same direction.—Chicago Mining Review.

To Develop Mineral Lands.

JACKSONVILLE, FLA., Sept. 12, 1887. Editor Manufacturers' Record

The Cherokee Iron & Marble Co., capital \$500,000, has been formed to develop valuable mineral interests near Murphy, N. C. The property is of great value, and only on account of its inaccessible lacation, heretofore has remained undeveloped. Mr. Ruffner, of Virginia, is president. The iron on this property seems to be superior to any yet found at Birmingham or elsewhere.

IAS. G. GIBBES.

Large Tobacco Warehouse.

DURHAM, N. C , Sept. 13, 1887. Editor Manufacturers' Record :

We have begun to erect one of the largest lobacco warehouses in the State for Capt. E. J. Parrish. The sales-floor is 205x120 feet Plans made by ourselves.

LINTHICUM & BETHELL.

Will Rebuild Cotton Mill.

LAWRENCEBURG, TENN., Sept. 10, 1887. Editor Manufacturers' Record

The Crescent cotton mill will be rebuilt with an increase of 1500 to 2000 spindles. CRESCENT COTTON MILLS M'F'G CO.

WASHINGTON, GA., Sept. 12, 1887. Editor Manufacturers' Record :

We are contemplating erecting a grist SIMS & PHARR. mill in the near future.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANU-FACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill

A Grist, Saw and Rice Mill.

WILMINGTON, N. C., Sept. 9, 1887. Editor Manufacturers' Record :

W. C. Keith and myself (firm of B. F. Keith & Bro.) are building a grist, rice and saw mill at Colly Mills, North Carolina, Pender county. We expect to have it com-pleted by December. We will also have water power to rent or lease out, as we will not need over one-fourth of our water power. It is 32 miles above Wilmington, N. C., and one can run a small steamer up to the mill. B. F. KEITH, JR.

Contemplate Doubling Ice Factory.

SPARTANBURG, S. C., Sept. 9, 1887. Editor Manufacturers' Record:

We are thinking of doubling the capacity of our ice factory before the next season, but have not fully decided yet.

W. B. HALLETT & Co.

A Cracker Factory.

RICHMOND, VA, Sept. 9, 1887. Editor Manufacturers' Record:

We will on the 15th commence the manufacture of cakes and crackers, which goods we expect to compete against the finest made anywhere, as our factory is fitted up with all the latest improved machinery.

G. H. GRIFFITH & Co.

WASHINGTON, GA., Sept. 7, 1887. Editor Manufacturers Record:

It is currently reported a compress and cotton seed oil mill will be erected in Washington as soon as the Washington & Elberton Railroad is completed, which has been surveyed and enough money to grade the road is now in the hands of the treasurer of the road, but it is not definitely understood who will be at the head of the new enterprises. Washington has a beautiful park, which has recently been finished up. Water works spoken of as certain in the near future. Real estate is on a boom. Land one mile from courthouse sold for a thousand dollars per acre.

J. C. WILLIAMS.

GALVESTON, TEX., Sept. 10, 1887. Editor Manufacturers' Record:

We are designing plans for Roman Cathelic Cathedral at Dallas, Texas.

N. J. CLAYTON.

Building Roller Flour Mill.

Marion, Ky., Sept. 9, 1887. Editor Manufacturers' Record:

A broom factory opened here to-day. A large roller flouring mill is under construction. A company with capital stock of \$50,000 have purchased the Crittender Sulphur Springs near this place, and are ready to build the largest hotel in Southern R. C. WALKER. Kentucky.

New Planing Mill.

LEWISPORT, KY., Sept. 8, 1887. Editor Manufacturers' Record:

T. M. Blanford has a new planing mill at this point and will do a good business.

GREENVILLE, MISS., Sept. 8, 1887. Editor Manufacturers' Record :

I have the contract to build compress warehouse. Building, 140x450 feet, and platforms 30 feet, one each side whole length. Contract for buildings only will J. J. HARTY. be \$21,000.

NEW OBLEARS, LA., Sept. 8, 1887. Editor Manufacturers' Record :

I have built a ginnery known as Fournet Ginnery at Gretna, parish of Jefferson, which ginnery has a daily capacity of 150 H. P. FOURNET.

To Erect a Large Tin Box Factory.

BALTIMORE, MD., Sept. 10, 1887. Editor Manufacturers' Record:

We have bought a little over 54 M square feet of ground, bounded by Maryland and Oak avenues and Walnut street and Cedar avenue, in the county. # of a mile from city limits, for the purpose of erecting extensive works for the manufacture of tin boxes, cans, &c. We, of course, branch out from this into confectioners' tinware and manufacturing specialties in our line for all trades. The main building for tin boxes. &c., will be brick, 50x150 feet, but whether 8 or 4 stories high we have not quite de cided upon. There will be several off buildings. Our boiler 100 horse-power, and engine 60 horse-power, already on the grounds in wooden shed built few weeks ago. We are in hopes to be ready in working order before winter, but should we find this impossible will not start until early in spring. H. F. MILLER & Son.

Rebuilding Saw Mill.

MEMPHIS, TENN., Sept. 10, 1887. Editor Manufacturers' Record :

Our saw min are now rebuilding.

Moore & Perkins. Our saw mill burned September 3. We

LITTLE ROCK, ARK., Sept. 10, 1887. Editor Manufacturers' Record:

Mines are being opened on S. P. Lee's property by August Gachot, L. J. Gachot and Charles Ettenie. L. J. GACHOT.

To Build Water Works.

WASHINGTON, GA., Sept. 10, 1887. Editor Manufacturers' Record:

Our town council has passed an order to appropriate \$10,000 towards water works. Nothing definite has been done yet as to contract. The plan mostly approved is, to have an iron tank on the public square of 100,000 gallons capacity, 100 feet nigh, with mains, &c. B. S. IRVIN.

RALEIGH, N. C., Sept. 7, 1887. Editor Manufacturers' Record:

We are building a prize house, 120x45 feet, 4 stories. LIPSCOMB & FAISON.

BUTLER, GA., Sept. 10, 1887. Easter Manufacturers' Record :

We have the contract to build the bridges and trestling on the Georgia Southern & Florida Railroad, as well as to furnish cross ties for same. This is a new road in course of construction from Macon, Ga., to Palatka, Fla., a distance of 290 E. B. WATERS & Co. miles.

Saw Mill.

JACKSONVILLE, GA., Sept. 8, 1887. Editor Manufacturers' Record:

I intend starting a saw mill.

A. H. GRAHAM.

OPELIKA, ALA., Sept. 10, 1887. Editor Manufacturers' Record :

We have the contract to build the labaratory at Auburn, Ala., at \$11,900. It will be a brick building with stone trimmings and slate roof. FLOYD & STEVENS.

To Bore for Gas.

LOUISVILLE, KY., Sept 9, 1887. Editor Manufacturers' Record

The Bowles Natural Gas Co. has been formed and will bore for gas within and near the city at once. It is our purpose to put down five wells whether successful or not. We hope to begin within two weeks from this time.

Information about the South.

HE marvelous mineral and timber wealth of the Southern States, their unrivalled capabilities as a manufacturing area, and the astonishing progress they are making in developing their natural resources and in utilizing their facilities for manufacture, are attracting the attention of the whole world. The extent of these resources and advantages is so 'ully and carefully set forth, and the progress of this development so faithfully chronicled from week to week in the MANUFACTURERS' RECORD, that it is now accepted everywhere as unquestioned authority on Southern affairs, and its statistics and statements are drawn upon by almost every writer or speaker on any Southern topic.

Its weekly issues constitute an authentic history of the Industrial progress of the Southern States. It furnishes every week a vast variety of information on Southern affairs that can be gained from no other source. It discusses in its editorial columns and in its correspondence every topic of Southern interest. It presents the resources and development of the South in all their phases. To all who are in any way interested or concerned in the prosperity of the South, or who care to keep posted as to the industrial and commercial progress of that section, the MANUFACTURERS' RECORD is indispensable.

Manufacturers and others desiring to locate in the South, will find the MANUFACTURERS' RECORD invaluable. In every issue there are many offers from Southern towns and land companies offering free sites and financial aid to those who will establish new manufactures, or remove their plants from the North to the South. There are hundreds of openings throughout the South for factories of all kinds, foundries and machine shops, brick yards, agricultural implement works, handle factories, all classes of wood-working establishments, &c. If you desire to know what the South Is doing, and what opportunities it offers for success in every line of industry, great and small, read the MANUFACTUR-ERS' RECORD.

As the leading industrial paper of the South, the MANU-FACTURERS' RECORD covers that entire section, and is closely read by manufacturers of all classes, mining operators, builders and contractors of railroads, water works, mills of all kinds, &c., merchants, capitalists and business men generally. It is undoubtedly the best advertising medium in existence through which to reach the rapidly developing manufacturing and mining interests of the fourteen Southern States. It is the most widely quoted and highly commended industrial journal in America. It is live, active and progressive, and is the recognized authority throughout the country upon the growth of the South.

Never before in the history of the South were the prospects so brilliant for a wonderful activity in all manufacturing, mining and railroad interests. Moreover, the abundant crops ensure great prosperity to the farmers. More machinery, and supplies for cotton and woolen mills, wood-working establishments of all kinds, iron works, railroads, mines, &c., will be purchased by the South during the next twelve months than ever before in the same length of time; and those who desire to secure a share of this trade, will find that an advertisement in the MANUFACTURERS' RECORD will prove a profitable investment, as it will bring their machinery directly before buyers in all parts of the South.

Sample copies and advertising rates mailed on application.

Published by the MANUFACTURERS' RECORD CO.

JOSEPH HUFFAKER, Pres. SUBSCRIPTION \$3.00 A YEAR.

BALTIMORE MD.

Water Works Contemplated.

BONHAM, TEXAS, Sept. 6, 1887. Editor Manufacturers' Record:

Our city is contemplating erecting and putting in a system of water works soon. E. L. AGNEW.

Machinery Wanted.

McMinnville, Texas, Sept. 6, 1887. Editor Manufacturers' Record :

We are going to start creamery November 1, 1887, and want on necessary machinery.

WM. F. MURRAY. ber 1, 1887, and want bids from companies

Spoke and Handle Factory.

CALERA, ALA., Sept. 5, 1887. Editor Manufacturers' Record:

A spoke, handle, hub, rim and bent work factory will be built at South Calera, Ala., as soon as labor can build it. The capital stock subscribed is \$20,000.

SOUTH CALERA LAND & IMP. Co.

BIRMINGHAM, ALA., Sept. 6, 1887. Editor Manufacturers' Record :

The Lomb & Hershey Co. has been duly organized with M. L. Hershey as president, and G. W. C. Lomb, secretary and treasurer. In addition to the foundry and machine shop, they will handle tools, machinery and machine supplies at manufacturers' net prices; do contract work and construction work and mechanical engi-LOMB & HERSHEY Co. neering.

Will Enlarge Shoe Factory.

RALBIGH, N. C., Sept. 7, 1887. Editor Manufacturers' Record .

We propose to enlarge our factory 1st January, 1888, putting in the latest improved machinery, to be run by power, steam or gas, we suppose.

W. H. WETMORE & Co.

Foundry and Machine Shop.

SALEM, N. C., Sept. 6, 1887. Editor Manufacturers' Record:

A foundry and machine shop will be started at Apopka City, Fla., as a branch of Salem Iron Works, of Salem, under the management of C. A. Hege, J. W. Emerson and A. C. Starbird. The resident managers will be Messrs. Emerson and Starbird, at Apopka, Fla. Operations will commence SALEM IRON WORKS.

Ice Factories for the South.

HARRISBURG, PA., Sept. 6, 1887. Editor Manufacturers' Record .

The American Refrigerating & Construction Company has lately closed a contract to erect a 10-ton ice plant at Cedar Key, Fla., and a 10-ton ice plant and cold storage warehouse of 100,000 cubic feet capacity at Waldo, Fla. We are negotiating to locate at other points. We also have contract in Natchitoches, La., and shall erect a 20 ton ice plant at Anniston, Ala., and Bristol, Tenn., shortly. Have purchased the site at both places.

FRED BALCOM, Gen. Man.

Negotiating for Machinery.

CULLMAN, ALA., Sept. 5, 1887, Editor Manufacturers' Record:

The North Alabama Land & Immigration Co. are negotiating for machinery to bore for minerals, &c. Col. John G. Cullman, general manager of the company, has been North for several weeks on this business. The artesian well of the Cullman Land & Improvement Co. is now PARKER & BROWN. about 600 feet.

Dummy Railroad Projected.

BLOUNTSVILLE, ALA., Sept. 9, 1887. Editor Manufacturers' Record:

Preliminary steps have been taken with a view to building a dummy railroad from here to the Louisville & Nashville Railroad, at or near Bangor, a distance of 121 miles. The road will run through a fertile valley, and the surrounding hills are rich in valuable ores, and covered with fine timber. The first meeting held made Dr. F. N. Hudson permanent chairman, and A. D. Howell, of the News and Dispatch Publishing Co., permanent secretary.

L. H. MATTHEWS.

WASHINGTON, N. C., Sept. 6, 1887. Editor Manufacturers' Record

I and others have in contemplation the building of a hotel on the coast of North Carolina (at Ocracoke, N. C.) for a summer resort, and are now organizing a stock company to that effect. C. M. BRUN.

Tuskaloosa, Ala., Sept. 5, 1887. Editor Manufacturers' Record:

We have a company for the manufacture of mattresses, the Tuskaloosa Mattress Co. Capital stock to be increased to meet the demand of the trade. E. P. Cockburn is president; Arthur Laycock, vice-president, and O. R. Cockburn, secretary and treasurer. Will supply the trade along A. G. S. R. R., L. & N. and M. & O. The Southern Suspender Factory, with capacity of 100 dozen per day, is another new venture, with Tom Clock, proprietor.

E. P. COCKBURN.

Large Brick Works.

LEEDS, ALA., Sept. 8, 1887. Editor Manufacturers' Record :

We are establishing a brick plant that will cost us about \$50,000. It will be a model yard, with latest improvements. Patent shearers clay house, 12 tunnels, Wingard kilns and Quaker brick making machinery driven by Atlas engine and boiler. Capacity to begin with 40,000 per STEWART & RICKERS.

McMinnville, Tenn., Sept. 5, 1887. Editor Manufacturers' Record :

A patent coil hoop factory has been started by E. P. Reynolds. It was put in operation about a month ago. Gives employment to about 20 hands, 10 in works and 10 getting out timber. Its annual output will be about 50 cars, or a business of about \$1,000 per month. Our creamery company has been organized. Has purchased lot and will begin erection of buildings within a week or ten days. They expect to get in operation the 1st of November. Capital stock \$3,000.

R. M. REAMS.

C. R. MAKEPEACE & CO. ARCHITECTS and Mill ENGINEERS PROVIDENCE, R. I. Plans, Specifications and Estimates furnished for Cotton and Woolen Mills.

BRISTOL, TENN., Sept. 8th, 1887.

I have opened an office at this place to do all classes of higher engineering, as well as furnish plans and specifications for any class of structures.

I. F. McADOO.

TRUSTEE'S SALE. Gallatin, Tenn., Cotton Factory.

Situated at Gallatin, Tenn., 96 miles from Nashville, on Louisville & Nashville Railroad; capacity 7,000 to 7,500 yards of goods per day. Looms 44, but arranged to make whea desired % or Osnaburg, 136 looms, 200 horse power engine; machinery new and in splendid condition; mill within few feet of Chesapeake & Nashville Railroad. There is also attached to factory merchant mill containing one pair of corn rocks (or burrs), and two pair of wheat rocks (or burrs); also some 20 acres and cottages (eleven in number) for operatives. Entire property cost about \$150,000, and will be sold to the highest bidder at Gallatin, Tennessee, October 20th, 1887. Sold without equity of redemption.

For particulars, etc., address

BANK OF GALLATIN.

BANK OF GALLATIN.

GALLATIN, TENNESSEE,

Oil and Coal Lands.

djacent to the famous Victoria Furnace, with bright prospects of anthracite coal. Vein now being devel-pped. Geological analysis point to vein of oil. Well ell a part interest for a reasonable figure. Address

A. S. HANGER,

LEXINGTON, VA

WANTED.

On sale or lease, a tract of good North Carolina wintry, about 5,000 acres, well stocked with Quail, oodcock and Turkeys. Negotiation at hard pan vice may be effected through

CLARENCE GORDON,
Southern Real Estate Investments,
99 LIBRETY ST., NEW YORK.
Offers of intermediaries, or those omitting full particulars, will not be noticed.

WANTED, A position as Superintendent of a cal man. Have had a large experience in remodeling. Can give the best of references from Northern and Southern manufacturers. Address BUPT:

Care Manufacturers' Record.

ANSWERS WANTED TO THIS.

A New England Cotton Spinner and En gineer will take a limited interest in a good Cotton Mill in the South of 10,000 spindles and upwards, and take operative and advisory charge, building and operating on condition that the Mill shall be fully paid for when done and running. Parties who have Cash to put into business can address

J. P. T., Care Manupacturers' Record BALTIMORE, MD.

COPY OF ORDINANCE

Passed by the Council of the Town of West Point, Virginia, on the 21st day of April, 1879, and re-enacted and approved on the 22d day of March, 1887.

22d day of March, 1887.

Be it ordained by the Council of the Town of West Point, Va., that any party or parties investing in property in this town for the purpose of conducting any enterprise, such as manufactories, packing houses, &c., and actually operating the same, they shall be exempt from all corporation taxes upon such property, and all machinery and improvements thereon, for the term of ten years from the purchase of such property. such property.

It is also ordered that the Mayor is here-by instructed to advertise this ordinance in the "Manufacturers' Record," a paper published in the City of Baltimore, Md.

E. WILKINSON, Mayor.

D. W. K. PEACOCK, Real Estate Agent,

CARTERSVILLE, GA. Minerals a Specialty. Refers to THE HOWARD BANK, Cartersville, Ga.

TEEL RAILS

Logging, Mining and Plantation

RAIL AND TRAM BOADS.

Light Sections Rails and Spikes in stock. Locomotives, Logging Cars, etc. NEW AND SECOND HAND.

HUMPHREYS & SAYCE OFFICE No. I BROADWAY, N. Y.

WM. E. TANNER,

No. 1415 Main Street, Richmond, Va. Is prepared to furnish promptly

LICHT LOCOMOTIVES.

Dummies for Street Railroads,

Pole Railway Locomotives and Cars, ENGINES, BOILERS, & SAW MILLS.

Also, Freight Cars, of all styles, Railros Spikes, Fish Piates, Bolts, Car Axies, Car Wheels, Trucks, Links, Pins, and other Car Forgings, Bar Iron, Steel Horse Shoes.

FOR SALE. 20,000 ACRES Timber, Coal @ Iron Lands

FRANKLIN COUNTY, TENN.,

Near the North Alabama State line, and on the main trunk of the Nashville & Chatta-nooga Railroad, 100 miles f om Nashville, 12 miles from Stevenson and junction of this railroad with 'he Memphis & Charleston, 27 miles from South Pittsburg, 50 miles from Chattanooga, 10 miles from Cowen, 15 miles from Sewanee, the University of the South.

South.

These lands are surrounded on all sides by iron furnaces and large coal and iron consuming centers. The location is in the midst of the Cumberland Mountains; good iron furnaces and large coal and iron consuming centers. The location is in the midst of the Cumberland Mountains; good average soil, splendid scenery, pure air, good health, and every variety of mineral waters. The forest consists of Pine, Poplar, Oak, Ash, Chestnut, Hickory, Cherry, Black Walnut, and generally every variety of hardwood common to this country, very large, valuable, and in great quantity. The iron ores of brown hematite assaying above fifty per cent. of pure metal are apparently inexhaustible in quantity. The coal consists of three separate and distinct measures: 1st vein, top 4½ to 5 feet, hard grate; 2d vein or middle, 3½ to 4 feet. good gas, coking and grate; the 3d vein and lower, 3 to 4 feet, and superior to either of the above, approximating the anthracite. These coals are seen appping out all over these lands, and in places much thicker, but have not been developed sufficiently to state specifically their great extent or valuable properties, except to say that the quality is apparently everything desired, and the quantity practically unlimited.

The present railroad divides this land in nearly equal parts, and the coal can be reached by a branch road within one and one-half miles, and no obstructions in the way. Splendid sites for furnaces or manufacturing purposes. Stone in great variety, good quality and of great value. The exact acreage to be ascertained by a new survey or measurement. This land can be divided into about equal parts, giving to each half all the minerals, timber and facilities needed, and will be sold and divided in this way if desired. The present owners will take and reserve one quarter interest if allowed to do so. This property has only to be examined by an expert, and its present and prospective money value approximated. Title perfect. Terms, one-fourth cash, balance in one and two years, and price very low. For further information and particulars address

NASHVILLE,

CARE MANUFACTURERS' RECORD. BALTIMORE, MD.

30,000 ACRES Timber / Iron Lands,

Perry County, Tenn.,

Perry County, 1enn.,
On the waters of the Tennessee and Buffalo rivers, about sixty miles west from Nashville, and on the projected Midland and Ohio Valley Railroads. The Midland is now under contract from Memphis to the Tennessee river, 135 miles, and will in the next twelve months reach Nashville. The land is of average soil and quality. The timber is mainly Poplar, White, Black and Mountain Oak, Ash, Hickory, and in fact all varieties of hardwood. The iron ores of brown hematite are found in large abundance all over these lands. Both the timber and iron can be reduced on the spot and shipped in every direction by water or rail, or in the raw state to large consumptive markets. Title perfect. Terms, one-third cash, balance in one and two years. The exact acreage to be ascertained by a new survey or measurement. Thorough examinations solicited. Address

NASHVILLE.

CARE MANUFACTURERS' RECORD

BALTIMORE MD.

DECATUR

GREAT * INDUCEMENTS

⇔ Offered to Manufacturers
⇔

* TO LOCATE IN NORTH ALABAMA. *

Decatur Land, Improvement & Furnace Co.

PAID-UP CAPITAL OF \$1,000,000.

WITH 5,600 ACRES OF TOWN LANDS AND 50,000 ACRES OF MINERAL LANDS, WITH MAGNIFICENT

MANUFACTURING SITES LOCATED ON THE TENNESSEE RIVER, IS PREPARED TO OFFER

GREAT INDUCEMENTS TO MANUFACTURERS IN THE WAY OF SITES,

AND MONEY AT LOW RATES OF INTEREST, AND THE

BACKING OF A POWERFUL COMPANY.

→ TWENTY-SIX * INDUSTRIES ←

HAVE LOCATED HERE THE LAST FOUR MONTHS.

WATER COMMUNICATION WITH THE MISSISSIPPI RIVER ALL THE YEAR ROUND.

Two trunk lines of Railroad, the Louisville & Nashville and the Memphis & Charleston, cross the river at this point.

Two more trunk lines in process of construction.

IMMENSE FORESTS OF HARD WOOD AND PINE AND BOUNDLESS QUANTITIES OF COAL AND IRON IN EASY REACH. THE WORKINGS OF THE INTERSTATE COMMERCE BILL WILL RENDER NORTHERN COMPETITION PRACTICALLY OUT OF THE QUESTION.

The Summers in this region are Cool, the Winters Pleasant and the Locality very Healthy.

CORRESPONDENCE WITH MANUFACTURERS SOLICITED.

ADDRESS ALL COMMUNICATIONS TO

WM. E. FOREST, SECRETARY, - - - DECATUR, ALA.

The Egan New Improved No. 2 Self-Feed Rip Saw.

We illustrate herewith an improved selffeed rip saw, and call special attention to its simplicity and the extreme durability of its

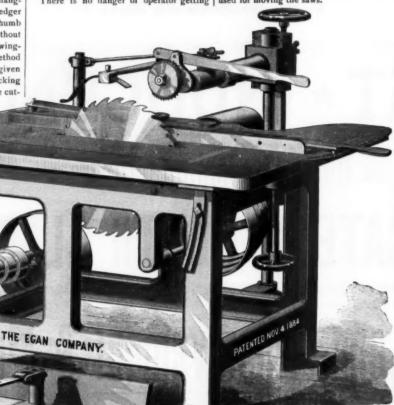
It has several new points of advantage and convenience, viz: A very reliable, powerful feed, much simplified and with nuch less machinery-a method of changing from a self-feed to a hand-feed and edger in one moment by loosening one thumb screw-a way of getting at the saw without disturbing the feed works by simply swinging feed-arm out of the way, and a method of feeding a piece so that it is always given a slight lead against the fence, and tracking the feed saw in such a manner that the cutquick ripping of strips, or ripping of any kind, also as a first-class re-saw, will find it a great labor saver.

The re-sawing attachment is shown in the cut; it is attached to the regular fence and movable with it, and can be beveled to any angle so as to split straight or bevel siding; and with a 22-inch taper saw, which is used for re-sawing, it will re-saw straight or bevel stuff 734 inches wide.

There is no danger of operator getting

rigid while the file is at work, thus preventing breaking, hanging or filing the teeth out of shape.

The gummer makes eight strokes of its file to one revolution of the crank, two of which are used in lifting the file from the tooth, leaving six strokes of work on each tooth; therefore only one-fourth of the time is lost, while in all other machines three-fourths or six out of eight strokes are used for moving the saws.



IMPROVED NO 2 SELF-FEED RIP SAW,

ting blade always takes out the kerf made | his fingers cut, and no danger of the board by the feeder. The manufacturers give the following description of it:

The feeding saw is geared up, and can be lifted instantly out of the feed kerf, so as to stop the feed, and pull out the lumber if necesary.

The frame is cast cored style and is very strong and well braced, and stands very substantially on floor.

The feed is very powerful, and consists of 4 speeds, 60, 80, 100 and 120 feet per minute, and it can be quickly changed from one to the other.

The table is of walnut and cherry, with a thick plate surrounding saw, and is hinged at back end, and (when feed-arm is swung back) can be raised up by the screw or clamp, or can be lifted clear up, giving free access to the mandrel.

The cast steel mandrel is extra heavy and is of best crucible steel, running in self-oiling boxes. The pulley or mandrel is 8 inches diameter, and 81/2 inches face, and should run 2,000 to 2,500 revolutions per minute, according to size of saw used when ripping. The mandrel is fitted with a substantial outside bearing which allows of very heavy work being done with the greatest ease and without strain on the ma-

The patent fence is adjustable from the working end of machine, so the operator can change instantly from one width of cut to another without loosening any screws.

This machine will rip any kind of wood, either hard or soft-taking the place of the common rip saw for hand use-and the feed is so powerful that it will do the work of m three to six men, and do it cleaner, with no jerks or resting marks on the cut. Planing mills, furniture, chair, bracket and flying back, as the boards are held firmly on each side of cutting saw by a spring. Several saws can be used on mandrel if neces sary for sawing blind slats or work of that class."

For further information address the manufacturers, the Egan Co., 228 to 248 W. Front street, Cincinnati, Ohio.

Maxwell Gin Saw Gummer.

The advantages in using a gummer on gin saws and the superior advantages of the Maxwell gin saw gummer are claimed by the manufacturers to be as follows:

"1st. By the use of a gummer the saw teeth are kept as long as when new; consequently the gin will do more work than if the teeth are short, a condition they are sure to arrive at when either machine or hand sharpened, and if often sharpened the shorter the teeth become. The Maxwell gummer overcomes this trouble and keeps the saws in A I order until worn completely out.

2d. In side filing the throat of the teeth is left sharp or in the shape of an inverted V, which tends to cut the fiber, injure sample and keep gin from doing its full amount of work. The Maxwell gummer overcomes this by leaving the throat square or flat, allowing the saws to do full work, making a better sample and free from gin saw cuts or naps.

3d. By using a Maxwell gummer any gin owner can gum his gin and keep it in as good order as when new.

We challenge the world to produce a machine equal to the Maxwell gummer for speed, accuracy, simplicity and price. It is fitted with a quick feeding device which feeds the teeth instantly as the file is drawn moulding factories, and all parties wanting from the saws, so that the saws are perfectly

The files are small flat files, costing \$1 per dozen, and we guarantee one file, costing 81/2 cents, to do more work than a circular file costing \$1 each.

The quick-feeding device is patented on our machines, and no other is or can be fitted without infringing.

The file is mounted on an elastic file arm, and pressure can be varied to suit work so as to always adjust itself to strike square in throat, avoiding all liability to injure the point of the tooth; and it never cuts more

The Heaviest Pig Iron Production on Record.

The condition of the blast furnaces of the United States September 1, 1887, in and out of blast makes the following showing:

Fuel,		blast.— Weekly capacity.		of blast.— Weekly capacity.
Charcoal	130	13,900 36,878 87,953	99 72 70	10,729 17,294 28,686
Totals	359	138,725	241	55,709

This is the largest capacity reported in blast since these reports were first begun in the Manufacturer in 1872. Compared with a month ago there is one less charcoal furnace in blast and 496 tons capacity at furnaces using charcoal. There are three more anthracite furnaces and 1,594 tons more capacity, while at the bituminous furnaces the number in blast has increased 23 and the capacity 17,098 tons. The great increase this month is due, of course, to the resumption of furnaces that were laid idle by reason of the strike in the Connellsville coke region.

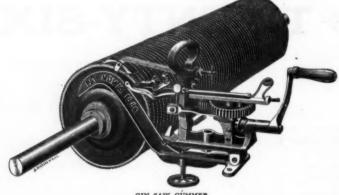
As compared with a year ago the condition of the furnaces in blast is as follows:

	_Ser	veckly	-Sep	pt. r, '86. Weekly
Fuel.	No.	capacity.	No.	capacity.
Charcoal		13,900	66	14,105
Anthracite	130	36,872	121	34,091
Bituminous	143	87,953	132	76,270
Totals	359	138,725	319	121,476

The number of furnaces in blast and their capacities on the first of each month since January 1, 1887, is as follows:

-Ch:	Weekly	-Anth	Weekly	-Bitu	Weekly
1887. No.	cap'y.	No.	cap'y.	No.	cap'y.
Jan. 166	11,895	126	35,633	140	80,132
Feb. 168	12,235	137	38,099	148	85,981
Mar. 161	11,572	142	39.707	146	83,834
April 150	11,337	143	39-477	151	86,709
May 154	10,819	243	40,873	149	86,823
June 162	11,809	145	41,288	104	54,767
July 177	13,969	146	37,662	101	57,355
Aug. 180	14.396	127	35,278	120	70,855
Sept. 179	13,900	130	36,872	143	87,953

Allow 10 per cent. for excess of figures of capacity over actual work done the production of pig iron in this country on September I was at the rate of 6,492,304 tons annually. This figure will not be reached this year, but one thing is certain, the rate of the production of pig iron at the present moment is the greatest ever known in the country. And in the face of this stocks are not increasing materially. On August I stocks of coke iron were the lowest reported during the five years that this association has made monthly reports of stocks, the total being but a small fraction over 100,000 tons. The reports of stocks that we receive in connection with our blast-furnace reports indicate that there is not as yet any material advance in stocks.



GIN SAW GUMMER.

on either point or base of tooth, but just | right, leaving the tooth perfectly true.

The machine is instantly and easily adjusted without stopping.

Our claim for this machine is not as a gin sharpener, but purely a gummer; yet it will leave the gin in far better condition for work than nine-tenths of the sharpeners now in use; still we recommend that the teeth be rounded by the use of the Duplex or other good filer after using the gummer."

Further particulars can be obtained from the manufacturers, Messrs. Brown & King, of Atlanta, Ga.

There must be for some time to come, in the West at least, considerable buying by consumers to bring stocks at consumers' works up to what they were at the beginning of the coke strike, and though ultimately the present tremendous rate of production must be felt on stocks and prices, it has not as yet. American Manufacturer.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$3.00 a year.

of he co

TRADE NOTES

Wiswell Electric Mining Machinery.

For some time the attention of inventor een turned toward the importance of electricity in ore treatment, and the past few years have witnessed a remarkable advancement in this direction. In many mills, in different parts of the country, elec tricity in some form is applied with satisfactory results. In 1884 the Wiswell mill was oduced, and since that time every effort has been made that practical experience has dictated to bring it to a state of perfection so that its merits in its work would recom mend it to conservative mining men. This mill has been thoroughly tested on the different varieties of ore found in every part of the country, and its operations have been carefully watched by experts for the purpose of suggesting improvements wherever ne sary. As the result of this continued trial most careful study of the requirements neccessary to insure success, the Wiswell Electric Mining Machinery Company now present to the mining world for its consideration their improved pulverizer and amalgamator combined, and it is confidently claimed by this company that it has now perfected a machine simple and economical in construction and operation, and capable of doing more and better work than any other machine designed for the purpose ever introduced; and those who have given this machinery careful examination very strongly confirm this claim. The following prominent points of superiority are presented:

First. Its cost is much less than any other machine of sufficient capacity to do the same amount of work.

Second. It requires less power to run it (about 10-horse.)

Third. Its wear and tear is much less than any other quartz mill doing the same amount

Fourth. The quality of work done by it is greatly superior to that done in any other quartz mill now in use; it crushes to a uniform fineness, yet makes no slimes, so that no sizing is required for concentration. It is equally well adapted to crushing and pulverizing all classes of ores, either for nalgamation or concentration.

Fifth. Amalgamation is carried on in the same operation with the pulverizing by placing a small quantity of mercury into the mill from time to time, as the richness of the ore may require.

With ordinary care there is no loss of mercury by flouring, and consequent loss of gold, as in most other mills in which mercury is used. The quantity of mercury used is from five to twenty-five pounds, and it can be changed as often as desired without loss of time in either crushing or amalgamating By opening a gate the amalgam is discharged from the mill in three to five minutes, and clean mercury introduced in its place while the work of the mill goes continually on.

Full explanation and description will be promptly furnished by the Wiswell Electric Mining Machinery Co., 4 Postoffice Square, Boston, Mass .- Mining Review.

STANDING out as one of the bold landmarks in Memphis is the Peabody Hotel, one of the old landmarks of the town. In this hostelry, now managed and owned by C. B. Galloway & Co., will be found a first-class conducted hotel, upon the modern plan, with all the elegant ease and comfort that can be desired. In no place in the South have I found a hotel managed upon more strict and sensible plans than the Peabody. especially where the great laws of hygiene and sanitation are concerned, and I affirm, without the fear of contradiction, that in no city in the South, and with but few exceptions in the North, is there more regard shown for the dietetic laws of life which should

govern all public hostelries. Having been refurnished during the past summer at a heavy expense, the bedrooms are nooks of exquisite repose and pleasure. Cleanliness is discernible everywhere, and it is refreshing to the traveler to remain over under such conditions. The table is par excellence, and like Fred. Cozzen's oxygiporean win not a headache or a backache in any quantity of it. The service is most admirable. Peabody stands out as a living landmark to the progress of the city in the advancen of the dietetic laws of life, and in this respect it has won an enviable reputation.

ROCHOW COMPOUND ENGINE. - Those who would like to see a beautiful illustra tion of the application of steam as exemplified by the Rochow compound engine, F. Rochow, manufacturer, Brooklyn, N. Y. should visit the machinery department of the Murray Hill Hotel, in New York city. where can be seen two of the largest size one medium-sized Rochow engines, furnishing the power for the immense electric light and refrigerating systems, besides the passenger and freight elevators. All the other power required in this great hostelry also comes from the same source

THE self-heating bath tubs manufactured y the Day Manufacturing Co., of Detroit, Mich., are becoming so popular wherever used that this concern have been behind with their orders, and will be obliged to build a large new plant this fall in order to supply the demands for next season. These tubs are well made of the best material and afford a great luxury at a small cost. Being portable they can be moved from room to room if so desired, as in a case of sickness. The Day Manufacturing Co. make a specialty of fitting out hotels and barber shope with bath tubs and water heaters. The have recently invented a very simple though ingenious steam heater for heating water for hotels and barber shops. It will burn wood coal or coke, and has a capacity for heating 100 gallons of water per hour. An illustrated catalogue and price-list will be sen upon application. These tubs and heaters are a new thing and well worth investigating.

THE Ball automatic high speed cut-off engine has reached a state of wonderful per-We know of no better evidence of the popularity of these engines than the fact that these works have been running night and day for the past year in order to meet the increased demands for their engines. The engine is made distinctive by virtue of the new principle in steam engineering embodied in its governor, by which absolute regulation is obtained under change of load and boiler pressure, and also from the fact that its valve has a telescopic adjustment which takes up any wear, thus remaining steam tight. This company has turned out during the first half of 1887 in the neighborhood of 15,000 horse-power, an average of ost an engine daily.

ARCHITECTS and builders should send to The National Wire & Iron Co., of Detroit, Mich., frequently for their new designs in cresting, railings, etc. The National Co. are doing a large business all over the country, and their work is noted for its great beauty and handsome finish. They have recently made a specialty of wire cloth and brass work for banks and offices, but carry a full line, including iron chairs and benches, stable fixtures, weather vanes, etc. Their latest issue catalogue, fully illustrated, should be in the hands of every architect, builder and hardware merchant of the South.

THE Volkner & Felthousen Manufacturing Co. have recently received orders for water works engines for Marion and Columbus, Kas., Kewanee, Ill., and St. Paul, Neb. This firm reports a large increase in their trade for this year, and have doubled their capacity.

Brown & King, of Atlanta, are the only cotton mill supply manufacturers in the South, and they make equally as good goods as can be procured in the East. Nothing can more clearly demonstrate this fact than the securing of this large order. The knowledge and ability they display in their factory and salesroom is characterized by the superior lines of goods they turn out and These gentlemen not only manufacture cotton and woolen mill supplies, but deal in all kinds of mill furnishing goods. They make all kinds of canvas and leather work for mill use, such as strapping, pickers, lugs, loops and so forth, on an ex This department is in charge of a man of fifteen years' experience, a man who has been pronounced as being one of the most skilled workmen in this line in the United States. Besides, the very latest and most improved machinery is used, and by this means they are able to turn out good equal in quality and at as reasonable a price as can be found anywhere in this country. A few days ago they secured one order alone unting to \$20,000. This, too, in the face of the strongest competition from the large houses in the North and East. This order was placed by the West Point Manufactur ing Co., for cotton mill supplies to be put in their new mills, now in course of erection. The securing of this order is not only gratifying to the many friends of this young firm but speaks in loud tones to the public, show ing that Atlanta can compete with the world in anything she undertakes. Indeed, it goes still further and shows that the South making rapid strides in manufacturing the class of goods that she mostly needs, and that her people are beginning to realize the fact that they can make just as satisfactory purchases here at home as they can make in any market of the world,-Atlanta Consti-

THE American Injector Co. of Detroit. Mich., report a splendid business-much of it coming from the South. The Milburn Gin & Machine Co., of Memphis, and many other large concerns in the South now use this injector exclusively, and are loud in its praises. Remember, these injectors are sold on their merits, and will be sent on trial to responsible parties. The growth of the company's business is largely due to duplicate orders from old custo

WILLIAM TAYLOR & SONS, who are the proprietors of the Columbia Iron Works, Brooklyn, N. Y., established nearly half a century, report their foundry as particularly full of orders. They manufacture hydro static presses and general machinery.

GEORGE P. CLARK, Windsor Locks, Con ecticut, has just received an order from the Government for a number of trucks. provided with rubber wheels, for use in the surgeon-general's department at Washing-

CAUSES OF BOILER EXPLOSIONS -- We are ware of the fact that in entering upon the subject of boiler explosions we are venturing upon what is generally regarded as dan gerous ground, but we have a theory on which we feel safe in venturing a little reputation. When we read, at the end of an account of a disastrous explosion, that there was an abundance of water in the boiler at the time the accident occurred, we do not question its truthfulness. A fatal accident of a different nature which happened in this city recently, illustrates our theory of boiler explosions. A freight ele-vator, designed to carry with safety 80,000 pounds, fell with no other weight than that of one of the proprietors, a man weighing less than 200 pounds, upon it, inflicting injuries from which he died. The absurdity of looking at the unfortunate victim for the cause of the accident will be at once acknowledged. So it is with boiler explosions. The boilers are weakened from one cause and another, and then rapidly grow weaker, and the ultimate effect is an explo-

sion under circumstances not at all sugges tive of danger, there being, perhaps, ple of water and no extraordinary pressure. believe that the recurrence of which the proprietor, and often the engineer, knows nothing, in the absence of a trustworthy alarm, is the most potent cause of boiler explosions, and hence that automatic low water alarms are necessary to safety. The experience of users of the Reliance Safety Water Columns shows that the low water alarm is sounded about once a month on the average, notwithstanding the extra watchfulness on part of the attendants which these alarms naturally induce, and it stands to reason that the frequent recurrence of low water has a fatal effect, and that any thing which can be relied upon to obviate it is a very desirable investment,-From Catalogue of Reliance Alarm Gauges, of Cleveland, Ohio.

Literary Notes.

An unusually important work is announced by Cassell & Co. It is "Martin Luther; The Man and His Work," by Peter Bayne, LL. D. Dr. Bayne's sympathy is as great as his literary skill. The reader will not only made acquainted with the facts of Luther's life, but he will follow the events of his career with the vivid realization of a spectator of a powerful drama. One who has seen the early pages says of this remarkable work that it "is undoubtedly one of the most comprehensive and accurate personal histories of that great promoter of of the general democratic movement of modern time, and also a capital record of the notable chapter in spiritual evolution."

THE War Series in the Century, so far as it relates to the descriptions of campaigns and battles by distinguished generals, will virtually close with the November number. Future papers on this subject will be of a general or at least untechnical sort; among them a curious and popular statistical paper on "Regimental Losses in the War." narratives of personal adventure, "Colonel Rose's Tunnel from Libby Prison," etc. General Sherman's article on "The Strategy of the War" will appear in an early number,

Important.

When visiting New York city, save bag-gage express and carriage hire, and stop at the Grand Union Hotel, opposite Grand Central Depot.

600 handsomely furnished rooms at \$1 and

Goo handsomely furnished rooms at \$1 and upwards per day. European plan. Elevators and all modern conveniences.

Restaurants supplied with the best. Horse cars, stages and elevated railroads to all depots. You can live better for less money at the Grand Union Hotel than any other first-class hotel in the city.

THE American House, Boston, is one of the favorite hotels of that city. It has a large patronage of the best class of guests, and visitors will there find a hotel under the most perfect management.

THE Palace Hotel, Cincinnati, Ohio, is the best, finest furnished and most complete \$2.00 hotel in America. 250 rooms; 140 front rooms. Complete fire apparatus and iron balcony fire-escapes.



MANUFACTURERS' AGENCY

MACHINERY. New and Second-Hand of Every Description.
COTTON AND WOOLEN A SPECIALTY.
Also, Cotton Yarns of All Descriptions,

L. GODFREY, 26 Exchange Place, PROVIDENCE, B. I.

THE

Hercules Water Wheel

+ IN THE SOUTH. +

WHAT SOUTHERN USERS SAY OF HERCULES. THE

There is probably no higher authority in the South on water wheels than Mr. John Hill, civil and mechanical engineer, of the great Eagle & Phenix Cotton Mills, at Columbus, Ga. Read what he says of the Hercules Wheel.

The Best Wheel We Have.

JOHN HILL, Civil and Mechanical Engineer, Reference—Eagle & Phenix Mfg. Co.

COLUMBUS, GA., April 30, 1887. COLUMBUS, GA., April 30, 1897.

As to my opinion of the Hercules Wheel, will say: In our mill (the Eagle & Phænix) we have twenty-one (21) water wheels of various kinds, three of them being Hercules. I regard the Hercules as being by far the best wheel of any we have. It is the best in workmanship, absence from repairs, large per cent. in power, and in general satisfactory results. I know of no wheel its equal. At Holyoke, testing flume a few weeks since, I personally witnessed a test of a Hercules of the ordinary construction, which gave 83 96-100 per cent. of efficiency. Yours truly,

JOHN HILL.

JOHN HILL.

Cannot Speak too Highly of the Her-cules Wheel.

JAMES RIDDLE, SON & CO.

Brandwine Cotton Mills.

KENTMERE, DEL., April 27, 1887.

KENTMERE, DEL., April 27, 1887.

In reply to your inquiry as to the working of a "Hercules Water Wheel" now running at our mills, would say that we put in nearly two years ago a 39-inch Hercules Wheel, running under a 141-foot head. It is driving up to full regular speed three hundred and three heavy looms, with only half gate. We are about to enlarge the weave mill and add three hundred more looms, which will be driven by the same wheel. We cannot speak too highly of the Hercules. It has absolutely run without cost or derangement since it started, and has given eminent satisfaction in every way.

Yours truly,

Yours truly, JAMES RIDDLE, SON & CO.

Perfectly Satisfactory in Every Way.

PORTER WOOLEN MILL. er, President. J. W. Robertson, Gen. Manager.

six years since, and the other in 1883, and think so highly of the wheel that I shall use another in cotton mill this company is now constructing. Neither of the wheels alluded to have given the slightest trouble, and their working has been perfectly satisfactory in every way.

Yours truly,

J. W. ROBERTSON, Gen. Man.

The Hercules Wheels Have Given Perfect Satisfaction.

ROSWELL MANUFACTURING CO.
Sheetings, Shirtings, Checks, Yarns, &c.
ROSWELL, COBE COUNTY, GA., April 29, 1887.
In answer to yours of 25th inst., asking our opinion of the Hercules Wheel, will say our experience is as follows: In our new mill, built about four (4) years ago, we put a 30-inch Hercules Wheel, under a 21-foot head of water. It has given such satisfaction running this (5,000) five thousand spindle mill, that last summer, when we were compelled to put in a new wheel at our old mill, running 7,000 spindles, looms, twisters, &c., we put in a 36-inch Hercules Wheel, under a 27-foot head of water. All I can say is we have surplus power in both mills, have lost no time by any defect of wheels, and if we were putting up any more mills, would use the Hercules Wheel. They have given us perfect satisfaction.

Yours respectfully,
F. J. MINHINNETT, Prest.

A Good Wheel, and Has Given Good Satisfaction.

PEE DEE MANUFACTURING CO.

Plaids and Warps.

ROCKINGHAM, N. C., April 30, 1887.

We have been using the Hercules Water Wheel for more than six years. Our superintendent says it is a good wheel, has given good satisfaction, and its performance is equal to the claims of the maker. We have a head of 17 feet. Our wheel has a diameter of 39 inches. Under this water pressure the wheel has moved 4,000 spindles and the needed preparation, and 164 plaid looms. The above includes the dye house, machine shop and all other machinery which we employ.

Very respectfully,

WALTER L. STEELE, Prest.

Best Wheels I Have Ever Seen.

MARIETTA PAPER MANUFACTURING CO., Book, News and Wrapping Papers.

CLARKSVILLE, GA., April 29, 1887.

In reply to enquiry as to my opinion of the Hercules urbine Water Wheel, say: I have put in two, one about

and one 30-inch. They have given me perfect satisfaction, and I think that they are the best wheels that I have ever seen.

Yours truly,
S. A. ANDERSON.

Has Never Given the Slightest Trouble.

PACOLET MANUFACTURING CO.

Jno. H. Montgomery, Prest. and Treas

Pacolet, S. C., April 29, 1887.
Replying to yours of 25th, would say: We have a 54inch Hercules Water Wheel running, under 20-foot head,
12,000 spindles and 328 looms, with other necessary
machinery. Has been running about three and a-half
years, and has never given us the slightest trouble; not
an hour's stoppage during the whole time.

Very truly yours,

JNO. H. MONTGOMERY, Pres. and Treas

Well Satisfied With It.

WM. J. RUSSELL, Manager Princeton Factory

Manager Princeton Factory.

ATHENS, GA., April 28, 1887.

I have used the "Hercules" wheel since 1881, and am so well satisfied with it that I should not purchase any other it in want of a first-class wheel. It does all the manufacturers claim for it.

Yours truly,

WM. J. RUSSELL, Manager.

Has Given Entire Satisfaction.

Holcume's Rock, Bedford Co., VA., April 28, 1887. }
The Hercules Wheel has given entire satisfaction.
Very respectfully,
J. A. HARRIS & CO.

Unhesitatingly Say its the BOSS Wheel.

BUZELA, GA.. April 29, 1887.

I have been using a 21-inch "Hercules Water Wheel" since August 1880, and unhesitatingly say it is the BOSS wheel. It has performed with utmost satisfaction, and given more power than the makers claim, using water with more economy than any wheel I ever knew. T. W. G. Inglett, Esq., who has put up two "Hercules" for parties, says "it can't be beat."

Very respectfully,

BRAD. MERRY.



THE HERCULES

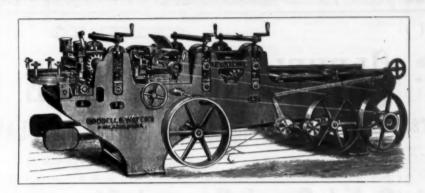


Gives the Most Power for its Size and the Highest Average Percentage from Full to One-Half Gate of Any Wheel Ever Made.

If you want to buy a new Water Wheel, if your old wheel does not give satisfaction, if you would like to know just how perfect a Water Wheel can be made, or if you are in any way interested in Water Wheels it will pay you to write for Catalogue No. 3 to the

OLYOKE MACHINE GO., Worcester, Mass.

Rapid Feed Flooring Machine.



SEND FOR DESCRIPTIVE CIRCULAR AND PRICES.

GOODELL & WATERS, Manufacturers,

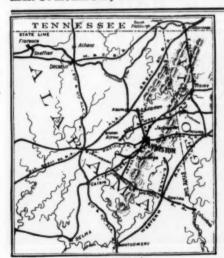
WESTERN WAREROOMS:

11 and 13 S. Canal Street, CHICAGO, ILL.

MR. C. L. RICE, MANAGER.

3002 Chestnut Street,

PHILADELPHIA.



LEDBETTER & CO.

Commission Dealers in

Lands, Stocks and Bonds.

=CITY AND MINERAL PROPERTY ==

A SPECIALTY.

Capital Stock \$100 000 CORRESPONDENCE SOLICITED.

ANNISTON, ALA.

DIRECT REPRESI
HUBBARD & CO.
AMERICAN SCREW COMPANY,
A. FIELD & SONS,
WHEELING HINGE COMPANY,
OLIVER BROTHERS & PHILLIPS,
THE SHELTON COMPANY.
J. P. TOLMAN & CO.
JOHN SOMMERS' SON,
NICHOLISON FILE CO.
HARTFORD HAMMER CO.
THE HENRY C. HART MFG. CO.

LAWSON & BRENIZER,
HOLROYD & CO.
BAKER CHAIN & WAGON IRON MFG. CO.
CULARKE BROS. & CO.,

BILLIAMSON & Stocks and Dies.
Wagon Hardware,
Links, Rings, &c.
Bolts, Nuts, etc.

Axes, Shovels, Hoes and Saws.
Screws, Bolts, Wire Nails, &c.
- Tacks, and Nails.
Wrought Goods, Butts, &c.
- Heavy Hardware.
Philadelphia Carriage Bolts.
- Braided Sash Cord. Hammers and Sledges.
Screen Frames, Lull & Porter,
Blinds, Spring Hinges, &c.

CLARKE BROS. & CO., BRANFORD LOCK WORKS.

Office, No. 14 W. German Street, CHARLES H. WIER.

BALTIMORE, MD.



Patapsco Flouring Mills.

YOUR GROCER FOR IT, ALSO FOR

C. A. GAMBRILL MNFG CO.

Office, 32 Commerce St., Baltimore, Md.

BOSTON.

rers of the Latest Improved Self-Adjusting ROLLER BUSHED and GENUINE METALINE BUSHED and Iron Bushed Rope and Iron Strapped



Improved Harcourt Patent filock

Send for the Celebrated STAR BRAND.



Send for Catalogue No. 5.



Improved Self-Adjusting Roller Bushed Iron Sheave.

OHIO HEENSILAGE

Silver & Deming Manufacturing Co.

LICOWSKY CLAY PICEON CO., Cincinnati, 6.

BERNHARD DIETZ Manufac-turer of Printers' Rollers, and Roller Composition. Factory, cor. Light and Mercar streets, Baltimore. Prices: Compositioa,

SEND

MACHINE (COMPANY,

143 to 161 Leonard Street, CLEVELAND, OHIO,

FOR PRICES ON THEIR

NEW CATALOGUE AND PRICE-LIST JULY 15, 1887.

R ROUSE PATENT ELECTRO-PLATED WELL POINT



is a NEW PATTERN, EXTRA STRONG; will stand rougher use than any in the market. A showing the openings before the wire gauze is soldered on. Vire gauze is soldered on. These Points are Electro-Plated, with Pure Block Tin inside and effore receiving the coverings, there being no raw iron to corrode or rust or cause an unpleasant taste in the water. The Electric Process by which it is patented and exclusively owned and controlled by me for Driven Well Points in the R. R. ROUSE, Indianapolis, Indianapolis

IAGARA lephtamping leph Tool

Manufacturers Machinery for Shearing Metal in all its Various Forms.

POWER SQUARING CIRCLE SHEARS POWER SLITTING SHEARS,

POWER CHOPPING SHEARS,

For Tack and Nail Plate, and for Cutting Steel for Cutlery Works.

OFFICE AND WORKS: Superior, Cor. Randall Street, BUFFALO, N. Y.

Send for our complete Illustrated Catalogu and Price List, and Mention this Paper.

G.A.Crosby & Co. Presses. Dies Special Machinery Sheet Metal Workers. 259, 261 & 263 RANDOLPH ST CHICAGO, ILL

SAUNDERS' SONS,

MANUFACTURERS OF THE ORIGINAL



Pipe Cutting and Threading Machine.

BEWARE OF IMITATIONS.
The genuine without our Trade
Mark and name. Also

Patent Wheel Pipe Cutter STRAM AND GAS FITTERS'
HAND TOOLS,

Pipe Cutting and Threading Machine Pipe Mill Use a Specialty. Send for Catalog

YONKERS N. Y.



Manufacturing Company. Covert



The Greatest Emporium in the World for the best Snaps, Chain, Rope and Web Goods, &c., manufactured, is the celebrated works of the

Covert Manufacturing Co. West Troy, N.Y.

For Sale by all lobbers Handling this Class of Goods.

THE MANUFACTURERS' RECORD

is the most thorough, complete and authentic source of information on Southern industrial affairs in existence. The subscription price is only \$3.00 a year. Some of our subscribers think every issue is worth that much. Try it for a year. Send in your subscription to-day. Don't wait until to-morrow; you may forget it.

→ HARDWARE. ←

Baltimore WHOLESALE Prices.
Kagle and Vulcan. ANVELS, B. D. to C. dis set
Wright's 9%c Armitage's Mouse Hole
Conn. Valley Mig. Co
Wikinson's AUGRES AND BITS. Con. Valley Mig. Co. Brown Stra. Cook's Douglass Mfg. Co. So. So. So. So. So. So. So. So. So. S
Russen Jennings' Auger, Dowell, Machine- Dowel and Hand Rail Bits
At pansive Bits, Carr s sman, sie; aug. Stransive Bits, Ives die 4 die 4 stransive Bits Blake's son auf go, die 4 stransive Bits Blake's son auf go, die 4 stransive Bits Blake's die 4 die 5 die 5 die 6 d
Hollow Augers, Ives
Hol. Aug., Ives' Expansive, each \$4.50, dis 25&20 \$ Hol. Aug., Universal Expansive, each \$4.50, dis 20 \$ Wood's
Gimlet Bits
Hol. Aug., Universal argansive, each \$4.50, dis 25 \$ Gimlet Bits, Diamond. \$5.50 \$ gross, dis 25 \$ Gimlet Bits, Diamond. \$6.50 \$ gross, dis 25 \$ Double Cut Gimlet Bits, Shephardson's dis 25 \$ Double Cut Gimlet Bits, Douglass' dis 25 \$ L'Hommedieu's Ship Augers dis 35 \$5 \$ L'Hommedieu's Ship Augers dis 35 \$5
Sewing Brass Ferrule
Awis, Patent Peg Awis, Shouldered Brad, \$\pi\$ gross \$\pi\$, 70—dis sg&ro \$\frac{1}{2}\$ & Awis, Handled Brad
Awis, Sewing, Common. \$1,70—dis 25 \$ Awis, Shouldered Peg \$\frac{1}{2}\$
Collins & Co
Collins & Co
Sheldon & Co., iron
Spring Balancesdis 50 %
Hand, Light Brass
Gong, Yankee
Crank, Taylor's
Lever, R. & E. M. Co's
Cow, Kentucky, Sargent's Listdis 70&10 \$ Cow, Moore's or Dodge's, Genuine Ky., new int; Nos. o 1 1/6 2 3 5 5 6 Hog j dis. 70&10 \$
Lever, R. & E. M. "O's
Hand Bellows dis 50 %
Prancisdis 20 \$ Mackrell's
Prancis
Barbed, % in. and larger
Penfield Blocks
Cast Iron Barrel Shutter, &c
Wrought Squaredis 70 5 Wrt. Shutter, all Iron, Stanley's listdis 60&10 5 Wrt. Shutter, Brass Knob, Stanley's listdis 40&10 5
Wrought Shutter, Sargent's listdis 60&10 \$ Wrought Sunk Flush, Sargent'sdis 53&10 \$ Wrought Sunk Flush, Stanley'sdis 40&10 \$ Wrought B. K. Flush. Stanley'sdis 40&10 \$
Carriage and Tire, Common, sew listdis 70&10 \$ Carriage and Tire, Philadelphia Pattern.dis 75 &10\$ Carriage Bolts, Clarke's
R. B. & W. Carriage (old list)
Engle Philadelphia Tire Bolt .dis 80 s Stove .dis 65 s Plow .dis 65 s Machine .dis 70 Rto 5 edit Ends and Lag Screws .dis 70 Rto 5
Tolt Ends and Lag Screwsdie 70&10 \$ BORAX. 90 \$ D net.
Spoffard's Patent dis softs \$ Ive's Patent Braces dis 50 \$ Common Balt (American) 45c. net Amidon's dis 40 \$
Q. S. Backus

LITHOGRAPHERS, BALTINORE ND.



Color Work

Fine Commercial Engraving

Are Unsurpo

ductions. Sole proprietors of the OELEBRATED LITHOOAUSTIO PROCESS











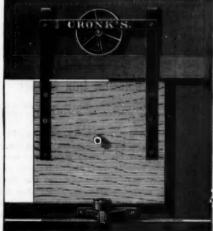




Wire Counter Railing.



Mocking Bird Cage



Wrought Iron. Anti-Friction. IT EXCELS ALL OTHERS

In Security of Door. In Ease of Motion.

In Simplicity of Application.
This Hanger and Iron-Clad Track costs less than others that are not as

good, and it sells at sight. Requires no oil. Has no flange wheels. Can not break or get off the track.

Cronk Hanger Co. ELMIRA, N. Y.

J. H. WILLIAMS & CO., Drop Forgin 16 BOWNE STREET, BROOKLYN, N. Y.



Brock's Pat. Drop Forged Chain Pipe Wrench.

The only all-steel Chain Pipe Wrench in the market. The only reversible and inter-changeable Chain Pipe Wrench. Six Sizes.



SYRACUSE TWIST DRILL CO., Syracuse, N. Y., U. S. A.

Manufacturers of



For WOOD and METAL.

Measuring Machines, Com-parators, Reamers, Drill Chucks, Tool Holders and Special Tools.

	253
Phillips, with Augursy.ac	7.50Bet
Shelf, plain	
Wew list	16. dla 75kto C
Shelf, Shary. Shelf, Shary. Shelf, Shary. Union Mut Co. Sargeet's flumason, Buckisy & Co's. BUTTS. Cast Brass, Fast Joint. Cast Brass, Fast Joint. Cast Brass, Fast Joint. Cast Brass, Loose Joint. Fast Joint, Brond. Loose Joint. Loose Joint. Loose Joint, Jap, with Accerss. Parliament Butts. Mayer's Hinges. Loose Pin, Acors. Loose Joint, Lt. Narrow. Fast Joint, Narrow. Fast Joint, Broad. Loose Joint, Broad. Loose Joint, Broad. Loose Joint, Broad. Table Butts, Back Flaps, &c. Lanide Blind, Regular. Inside Blind, Light. Loose Pin, Wrt. Loose Pins, Wrt. Rest John Wrt.	dis 53 %
Wrought Brass.	dia So 5
Cast Brass, Loose Joint	dis 33% dr.6 s
Loose Joint	dis yokto \$
Parliament Butts	dis poltro \$
Loose Pin, Acorus	dis politio g
Tips	dis 70 \$
Fast Joint, Lt. Narrow	dis 705
Table Butts, Back Flaps, &c Inside Blind, Regular Inside Blind, Light	dis 70%
Loose Pin, Wrt	dis polts s
Hart Manufacturing Co American Spring Hinge Co's	dis fokto \$
Blind Butts, Shepard's, Nos. 50 an Blind Butts, Shepard's, No. 650	d 60dja 70 %
Blind Butts, Lull & Porter Blind Butts, Huffer	dis 75kto 5
Standard Luli & Porter	dis politzo g
Sargent & Co's	l az.40; dis 66kzo \$
Humason & Beckley Mfg. Co Bradley s.	an. dis 10k5 %
\$25.50 19.00 82.50 84.00 87.00	90.00 33.50 36.50
gab, o 19,00 at 30 at 4,00 ay 300 CAN OPERERS. American New Idea No. 4, French No. 5, Iron Handise Sardine Scissors Sprague, No. 2, \$0 ; No. 2, 22; No. Universal	\$ gross \$3.50 \$25.00 gross
No. 5, Iron Handle	roes \$6.00, dis 45 % dos \$7.00, dis 55 %
Universal CAPS, PERCUSSION, P.	or \$3.00, dis 23% \$ 1,080.
CAPS, PSECUSSION, & G. U. M. C., F. C. trimmed. U. M. C., F. L. ground. U. M. C., Cen. Sive ground. U. M. C. Double W. Froof. G. D. & S. B. E. B. 1-10. Elev's. Musket, in 1-10's. Hicks Ground Edge in Brass Boxe	6gc 70C dis so \$
G. D. & S. B. E. B. 1-10. Eley's	33C. dis 10 fi
Hicks Ground Edge in Brass Boxe CARTRIDGES.	dia faha s
Hicks Ground Edge in Brass Bose CARTRIDGES. Rim	dis 40ks \$
Swaged Conical	noss. ong\$ 6.00
# 38 # 20 # 38 # 18	15.50
Canba. Horse and Curry,	41, 15.00; 44, 319.
Central Fire—2s, \$11.00; 28, \$13.50; Horse and Curry, Cotton, new tist, Aug, 1893. Cotton, new tist, Aug, 1893. Cast Steel, Polished. Cast Iron, Steel Polished. Pullard's. CASTESS. Bed Pale and Shallow Socket. Deep Socket. Martin's Patent (Phomis). CASTES LEADERS. Humanon, Beckley & Co's Sargent's.	dis 10 f
Cast Steel, Polished	dos \$5.00, dis 30 \$ dos \$0.00, dis 30 \$
Bed	dia 55 %
Deep Socket	dis 40 %
Humason, Beckiey & Co's Sargent's	dia 75 %
German Halter and coll Chain	diş 60 \$
Oneida Halter Chain (old list) Galvanized Pump Chain	dis 45 £
Jack Chain, Brass	dis 75 \$
Rod	gross 75c met
COTTON LINES.	y grown typ met
Cotton Chalk Lines, so feet:	b gn. so s
Socket Framing, Crossmans	din 69kg g
Socket Framing & Firmer Socket, Douglas	No. 1. Entra. 7585 758 7588 958
Socket, Peck, Stone & Wilcox Socket, Corner Tanged Firmers, Douglass'	7585 788 758 dia soli 45 8
I. Merrill's Socket and Framing Ch CLAMPS.	isoldia 65 tro 8
Ires, Screw, Eagle	dis soft so f
Iron, Carriage maker's, Carr & Cre Cure, Axia. Morway or Best.	wieydis ag §
Constage. Coal Hods—Griffiths'	dis toks s
Racking, new list	dis spikus §
Martin's Patent (Phomix) CATTLE LEADERS Humason, Beckley & Co's Sargent's. P. S. & W. CRAIN. German Halter and cold Chain. Traco, Breast and Fancy Onelda Halter Chain (old list). Galvanised Pump Chain. Jack Chain, Iron. Jack Chain, Brass CRALE. White. COTTON LIMES. CO	dis galen i

бне Факкель.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, Sept. 14, 1887.

The cotton crop of the South has been

The cotton crop of the South has been materially damaged, and the yield will be considerably short of what was expected a month ago. The yield will, however, we believe, be fully up to a good average, and the falling off from what was anticipared, will doubtless to some extent be counterbalanced by higher prices. The corn crop is safe and the South has made the largest crop on record. This will add immensely to the prosperity of that section.

Trade and industrial prospects are very bright and all signs point to a season of great activity.

In manufactured iron the local market shows no change and prices are as last quoted:

Ref. Har Iron, I to oxys to I	D.		
" I to 416x11/4 to 1	98	3.10@	2.40C
" " % to s, round and			
square	44	9.10@	2.40C
Hoop Iron, 11/4 wide and upward	68	2.500	3 C
Band Iron, from 116 to 6 in, wide	61	2.400	2%c
Horseshoe Iron	41	3 @	314 c
Norway Nail Rods	66	480	5%C
Black Diamond Cast Steel	68	8 @	0 0
Machinery Steel	64	3 6	436c
Spring Steel	**	3160	4 6
Common Horse Nails	64	8 6	0 6
Railroad Spikes, 51/2 x9-16	68	256	3 0
Steel Boiler Plate	08	286	4 C
Iron Boiler Plate	66	2140	4 0
Boiler Tubes			ff list

The market for scrap iron and old rails is somewhat weaker and prices would probably have to be shaded to induce purchases. Steel rails are also a little off. Pig iron remains as last quoted, viz:

Baltimore C				
Baltimore	ore)			8 00@39 00
Virginia C. E	. Charco	al Whee	l Iron 2	7 00@29 00
Anthracite, P				
	# 2			8 00@20 00
66	3	*******	I	6 000 18 00
44]	Mottled a	ad Whit	0 1	4 00@15 00
Old Rails				
Old Steel Rai				
No. 1 Wroug				
Old Car Who	eels	******	1	9 00@19 50

HARDWARE.

The business of the past week has been of about the same character and volume as last reported, and devoid of special interest. Quite a satisfactory trade is being done in sporting goods, many dealers taking hold of the line on account of the prevailing low prices and generally fair margins in the goods. Efforts are being made by the manufacturers of hammers and sledges to come to an understanding on prices, which at present are very low, and a sharp advance, it is claimed, may be expected at any time.

Nails are quoted at \$2.10 as before.

Philadelphia Iron Market.

PHILADELPHIA, September 13. 1887. The coming week will be largely given over to merry making by way of celebrating the one hundredth anniversary of the adoption of our federal constitution. This event will occupy the attention of the citizens and at least a quarter million visitors, it is estimated or guessed at, for fully three days. Hence, business in the iron trade will be more or less neglected. The events of the past few days have not been particularly interesting. Pig iron has ruled firm and quiet. The chief business has been in forge and the prices paid run from \$17 to \$17.50. The demand for foundry will be such as to keep good brands scarce and high. Common brands of No. 1 bring \$21 and of No. 2 \$19. American Bessemer furnaces are all under contract for large lots and foreign is occasionally heard of at \$20.50@21.50. The importers have not done much in foreign material, though an occasional lot of slabs goes at \$31.50. Rail blooms are called for by cable once in a while. Muck bars are \$31.50. The bar mills keep busy in meeting the current demand and prices are 2 to 2.10. The rail makers sell at 2.10 to 2.20, but have not yet affected that devoutly wished for consummation, a national combi-

nation. A good many factories are still restricting. The collateral interests involved stand in the way of a successful national association. The plate and tank iron makers report a fair, quiet, steady trade at 2.35@2 50 and the sheet iron makers are meeting with a good demand at about card rates. . Pipe are active. The Saturdays' meeting did some good. Steel rails sold to the extent of 35,000 tons so far as information concerning contracts could be obtained. Prices \$36@38. Mills are picking up next year business. Old rails are about what they have been for several weeks. Prices \$24@\$24 50, with the usual demand for an indefinite quantity at \$23@23.50. The scrap yards are pretty cleanly sold up. The bridge builders are keeping the structural iron makers busy. Angles 2.40. Beams and channels 3 30.

Cincinnati Iron Market Report.

Specially reported by Rogers, Brown & Co., Pig Iron Commission.

CINCINNATI, September 12, 1887. All features of the iron market continue to look favorable. For weeks past buying has been almost wholly for immediate wants, few consumers caring to place forward contracts. Excepting the Agricultural Works (which usually buy a year's supply in the summer) there have been comparatively few large forward contracts placed since the heavy buying of last fall. The result is that orders are much more frequent in num ber and urgent in character. This general condition, taken in connection with low stocks and active consumption by the mills and foundries, indicates a firm and active market for some time to come. Should the market begin to move upward, there would probably be another heavy buying movement. As it is, the volume of sales is full and probably represents very closely the actual consumption of iron. Southern irons are finding their market nearer home than usual. The Pennsylvania and other lines have materially advanced rates from the Ohio river to Pittsburgh and Eastern Ohio points, and this, with the low price of iron there, completely shuts out Southern iron. Old rails have stiffened slightly, and are in good request. We quote for cash f. o. b.

	HEC	T-BLAS	T POU	HDET.			
Ohio and	Southern	Strong		No. 1			
46	44	68	68	No. 3			
	ft Stoneco	al,		No. 1	30	500001	50
	ft Stoneco			No. s			
	ng and Sh						
Hanging	Rock Ch						
41	46	61	No. 2		33	50(023	50
Tenness	ee & Alab	ama Ch	arcoa	l No. 1	22	50@23	50
41	**		**	No. 3	31	00@33	00
		. 1	FORGE	L.			
Strong N	leutral Co	ke			\$18	81800	50
Mottled	64 6	* *****			10	50@17	00
Cold Sho	ortnings			*******	17	00@17	50
				ALLEABL			
Southern	Car-Whe	el Iron			25	00@26	00
Hanging	Rock Co	ld Blast	, No.	I	85	00@28	00

St. Louis Iron Market.

Specially reported by Rogers, Brown & Co., Gay Building, 204 N. 3rd street, St. Louis. W. H. Shields, Manager.

ST. Louis, Sept. 12, 1887.

Buyers in this market are a little more in the mood to take hold. Orders have been received the past week by local dealers from points North and West of here on a much more liberal scale than previously. Scarcity of cars is still an important factor in shipping. In the coke region the production exceeds car capacity so much that coke is piling up largely, and consumers are suffering for supply. The prevailing feature of the market continues to be scarcity of good Ohio softeners and coke foundry grades for immediate delivery. River shipments are almost completely suspended by low water. Business is active and the feeling is good in all quarters. We quote for cash:

1	HOT-BLAST CHARCOAL.		
ł	Missouri fax		
ı	Southern 91	50@22	50
I	COMB AND COAL.		
l	Southern No. 1 81	00@82	00
ı	Southern No. 3	SOMBE	00
*	Ohio Softeners 21	00@84	100

MILL IRONS.	
Missouri	
Southern No. 1	
Southern No. s	. 18 75 19 85
CAR-WHERL AND MALLEABLE I	
Southern	
Lake Superior	23 03@25 00
SCRP, AC.	
Old rails	24 00(8)25 50
Old wheels	20 50@21 00
Connellsville Coke, (Frick's)	6 15

Chicago Iron Market.

Specially reported by Rogers, Brown & Co. W. W. Backman, Resident Agent.

CHICAGO, Sept. 12, 1887. An active hand-to-mouth buying continues. Dealers here who receive Ohio iron on consignment are unable to get it fast enough to meet the demand for spot delivery. One or two round sales of Southern coke iron have been made during the week, and several moderate sized orders for L. S. charcoal iron have been placed. Prices are well sustained. There is a very heavy production of pig iron in the Chicago district, but none of it is now for foundry or forge purposes, all the furnaces running on Bessemer contracts. The heavy Eastern failures in iron are not felt in the remotest degree in the Western pig iron market, which from all indications, is on a sound

and healthy basis.	We quote for cash f. o.
b. cars Chicago:	
COKE AND ST	TONE COAL FOUNDRY.
Ohio (Hanging Rock) Blackband Jackson county	Softeners No. 2. 22 50@22 50 "" " . 22 50@22 50 "" . 22 50@23 50 ider " . 21 00@22 00
Sauthern Cohe No.	81 00@82 00
onthern Coke, No. s	% 20 50@21 50
" " No. 3	30 00@31 00
CHARC	OAL POUNDRY.
Lake Superior Southern	
	L AND MALLEABLE
Hanging Rock, cold bl	98 50@23 50 24 00@26 50 27 00@29 00 blast 27 00@29 00
OLD	MATERIALS.
Old Rail, American	94 00@25 00 90 50@21 50

Louisville Iron Market.

specially reported by Gzo, H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.

LOUISVILLE, KY., Sept. 12, 1887. The market for pig iron during the last

week has been more active, and several sales, both large and small, have been made. Prices have not changed, but the tone of the market is somewhat firmer than for a week or two previous. There is still considerable inquiry for silver grey irons, and the snpply is also still light. There is some inquiry for old rails and wheels, but the volume of business done in them is not large. We quote for cash as below:

PIG INON,	
Hanging Rock Coke, No. 1 Foundry	19 50@20 50 19 00@19 50
" Charcoal, No. z Foundry Southern Charcoal, No. z Foundry Silver Gray, different grades	21 50(0)22 50 18 50(0)20 00
Southern Coke, No. z Mill, Neutral	18 75@19 25 18 00@18 75 18 00@18 75
Southern Charcoal, No. 1 Mill	10 000 20 00
anging Rock Cold Blast	33 00@25 00

Chattanooga Iron Market.

specially reported by Lows & Tucker, Brokers and Commission.

CHATTANOGA, TENN., Sept. 12, 1887.
We can only report a continuation of great activity in general business all over the South. The stringency of the condition of the money market has served in some instances to embarrass operators, especially those who are weak in that particular point, but upon the whole business has been moving along quite satisfactory. The railroad lines are even more crowded than ever, and are taxed to their utmost possible capacity in their efforts to move the freight offered them, and in many instances the coal and coke interests are suffering materially. The condition of the market for pig iron is very

stiff as a general thing; those who have any to sell are masters of the situation, and dictate their own prices and terms. Quite a number of outside buyers have been refused quotations, and are met with the reply "we have none to offer." The outlook now is that prices are inclined to advance, but at present we continue quotations the same as our last report, \$18.50 for No. 1, and \$17.50 for No. 2 on a basis of 60 days.

THE MANUFACTURERS' RECORD, of Baltimore, is doing better and more effective work in the development of the industries and resources of the South than any other paper now published. It is constantly advertising the South, and calling the attention of capitalists and home-seekers to the splendid opportunities offered by this growing section. There is a wise and level head at the management of this journal.—Orlando (Fla.) Reporter.

List of Patents.

The following Patents were granted to citizens of the Southern States, bearing date Sept. 6, 1887. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

exhibitor — 369,464
Parrish, E. W., Hico, Ky. Hopple — 369,548
Perrot, L. A., and H. W. Warrington, Richmond, Va. Rotary engine — 369,469
Phillips, H. B., and W. M. Whaley, Suffolk,
Va. Lumber assorter — 369,469

A. P. THAYER, Solicitor of U. S. and Foreign PATENTS,

No. 86 Astor House, New York.

DIXON'S CRUCIBLES are the standard. The U. S. Government schedules always stipulate "Dixon's or their equal." In ordering your crucibles call for Dixon's and you will not be troubled with broken pots and wasted metals.

VIIM

MAPOF BIG STONE GAP.

Mr. J. F. McADOO, a skilled engineer, recently located at Bristol, Tenn., is making a complete topographical map of BIG STONE GAP and its surroundir ga, comprising an area of about 10 miles square. It will show accertately the contour of the surface, coal and iron beds, location of railroads in process of construction to that point, as well as additional points of interest and value. The published edition will be limited to the number of surscribers. All those wishing copies will do well to communicate with Mr. McAdoo at once. The price is \$2 per copy; in quantities at a cheaper rate.

FOR SALE.

13-in. Double Table Shaping Machine, new.
10-in. Shaoing Machine, new.
10-in. " " Gould & Eberhardt,
Planer, 2424, second-hand.
Planer, 2425, Pond, new. 24 in. x 6 ft.
25-in. B. G. S. F. Upright Drill, new.
25-in. B. G. S. F. Upright Drill, new.
25-in. Upright Drill, B. G. S. F. "
20-in. Upright Drill, B. G. S. F. "
1 20-in. B. G. Prentice Drill.
46-in. Old-tayle Drill, B. G. S. F. "
26-in. B. G. Prentice Drill.
Engine Lathe, 28xx, new.
Engine Lathe, 18xx, new.

Engine Lathe, 19x6, second-hand.

1 Ragine Lathe, 16 in. x 7 ft., second-hand.

1 Engine Lathe, 16 in. x 7 ft., second-hand.

1 Engine Lathe, 20 in. x 16 ft., new.

Engine Lathe, 29 in. x 16 ft., pewer cross-feed, new.

Engine Lathe, 18 is 6 ft., power cross-feed and compound rest, new.

Engine Lathe, 18 x 8 ft., power cross-feed and compound rest, new.

Lagine Lathe, 10 in. x 8 ft., power cross-feed and compound rest, new.

11-in. x 5-ft. B. G. Hand Lathe, with Chucks, s. h.d. 11-in. x 5-ft. Prentice Eng. "" " " " in 6-inch Double Cutting-Off Machine. Wood, Jennison & C. Patterson Forge with Hood No. 1.

Cold-Rolled Shafting, Hangers, Pulleys, &-c.

L. W. Pood Machine Co, Planers.

Currier & Snyder Drills.

McMahon & Co. Lathes.

FRASER & ARCHER,

FRASER & ARCHER,

121 Chambers St., New York.

One No. 1 Keystone Forge; second hand.

One No. o Buffalo Forge, with water tank for power;

Two Boiler Feed Pumps, suction 1 inch, and dis-charge 1% inch.

One Power Boiler Punch, second hand; punch % hole.

One Lawson Vertical Gas Engine, 2 horse power.

One Horizontal Steam Engine, 2 horse power; second hand. One Vertical Steam Engine, 5 horse power; new.

One Vertical Steam Engine, 8 horse power; new.

One Vertica! Steam Engine, 12 horse power; new.

One No. 6 Friedman Injector.

One Planer; second hand; 3s inch by 3s inch by 9 feet.

One Combined Engine and Boiler, 3 horse power;

One 40 to 60 horse Automatic Engine; new,

One 15 horse power Horizontal Engine and Boiler; new.
A complete Laundry Outfit; used 3 months.

WM. C. CODD, 2010 and 2012 Aliceanna Street, BALTIMORE, MD.

For Sale.

A 100 horse-power Stationary Engine and two Stationary Bollers, together with fronts, grates, eastings and trimmings. Said Engine and Bollers have been used, but have been thoroughly rebuilt, and are in A No. 1 order, and will be sold very low; or can attach a Mammoth Saw Mill and sell all low, and take part in good yellow pine lumber. Apply to

RICHMOND MACHINE WORKS. RICHMOND, IND.

FOR SALE.

1 second-hand 4 horse power boiler and marine; 1 No. 2 Kissel hand punch, second and; 1 second-hand 4 ft. stave jointer, for utter tube: 1 wood frame rip saw, xaw; emery wheel stand, collars on both ends; iso, 1 lot S. arm pulleys. The above for sale heap, or will trade for 34 inch iron planer, ddress ULRIOH & ALLISON, Book Palls, Ill.

ANNISTON, ALABAMA.



His INN is the most quiet, elegant and home-like place in the world. Its location in Anni-ton. "The Model City of the South," a thousand feet above the Guif, with pure sir, health-restoring water, within easy distance of New Orl-ant, Mobile, Montgomery, Selman Atlanta, Macon, Columbus, Ga., Rome, Chattancoga, Knoaville and Nashville, makes it unequalled as a great summer resert for Northern as well as for routhern people. Surrounded in swamps or malaria, and in the very heart of the great mineral belt of North Alabama, Georgia and East Tennessee: on the line of travel from Washington to New Orleans; from Cincinnati, St. Louis and Louisville to all points on the Guif; accessible by palace cars from any point in the United States, Anniston presents to the invalid, the pleasure recent or the explorer a delightful summer climate, pure, fresh and bracing air, the best water and most obarming scenery, and a point from which every city in the South, and the great mineral and timber belts, can be reached. This Inn is magnificently furnished, lighted by electricity throughout the entire building, and in every feature is sure to charm those who are so fortunate as to stop there. For full particulars as to prices, rooms, &c., address

H. HARDELL, Manager.

The F. F. ADAMS CO., Erie, Pa.

Hardware Specialties and Household Articles.





SOUTHERN TRADE To Secure

ADVERTISE IN THE

MANUFACTURERS' RECORD.

THE PATENT PILING PROTECTOR
OO., BRUNSWICK, GA., is prepared to protect piling from the Toredo and other Marine
Posts in any Harbor in the United States, and
will erect its plant, which is inexpensive, in
any Harbor where a contract is offered, and
prepare piling from the timber near at hand.
The process is thoroughly effective, indestructible in salt water, and protection for ten
years guaranteed. Is fully protected by
letters patent. Has been t-sted for six years;
is better than metal covering; as good and for
piling in some respects better than crecacting;
costs love than one-half as much as metal
covering or crecacting. Circulars fully explaining process will be sent upon application.
Correspondence solicited.
Address. THE PATENT PILING PROTECTOR

C. P. GOODYEAR, President, RRUNSWICK, GEORGIA.

ROOT'S NEW MON BLOWER

POSITIVE BLAST. IRON REVOLVERS.

PERFECTLY BALANCED.

Has fewer parts than any other Blower. Also, lacksmith Blowers, Portable Forges, Tuyers rons, and Gas Exhausters.

P. H. & F. M. ROOTS, Manufacturers, CONNERSVILLE, IND.

No. 7 CANAL STREET.

-WEBBER'S-Centrifugal Pumping Portable Machinery.

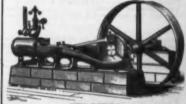


Giving greater efficiency than any other Centrifug

LAWRENCE MACHINE CO.

BOSTON, MASS

New York Office, 17 CORTLANDT ST.
AGENTS—J. Post, Jr. & Co., Boston, Mass.; Fair-banks & Co., St. Louis, Mo.; H. P. Gregory & Co.
San Francisco. Cal.; R. H. Buchanan, Mostreal, P.Q.



mg, compact, simple, strong, rable, and of

Superior Workmanship and Materials.

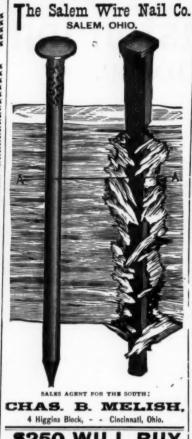
BEHLL Engine, Boiler AND MACHINE WORKS.

MERWIN MCKAIG. CUMBERLAND, MD.

The "MOGUL" Engines,

Pulicys, Sharting, Couplings, Collars, &c. Pulley Turning Machines, Pulley Boring Ma-chines, Shafting Lathes, Shafting Straightoners and Cylinder Boring Machines, Seld for low price-lists and big discounts.

25	0	3	2	
	SILVER PLATED	WARE.		
Holmes,	gers Manf. Co	dis	dis 508	25
Rogers I	s Steel Silver Plated Bros 1847	di	s 33 % 8	£10
C. Roger	SCREWS.	******	dis soë	cro
Flat Hea	Standard new list.	Feb. 15.		90
Round H	d Brightlead Blued	*********	******	65
Flat Hea	tead Bright. d Brass. d Blued (add 5 % to net Sliver Capped. Flat Head. atent Gimlet Point cammon or Lag. Flat Head, Iron. Round Head, Iron. Round Head, Iron. God, Beach. God, Hickory. ood. il, Sargent's. il, Humason, Beckley 8 il, Am. Screw Co., list Son's).			65
Flat Hea	d Blued (add 5 % to net)		70
Japanned	Flat Head			65
Coach, C	ommon or Lag		dis	70
Machine,	flat Head, Iron	*********	dis	55
Machine, Bench, Ir	Round Head, Iron		lis 55&	10
Bench, W Bench, W	ood, Beach	₩ doz #2.	25, dis lis 20&	10
Hand, W. Hand Ra	oodil, Sargent's		tis 25& lis 60&	10 5
Hand Ra	il, Humason, Beckley &	Co.'sd	lis 40&:	10 5
Jack (Wi	SCREEN FRAMES AND		dis	15 9
Standard	Window Screens No.	z, A do	E \$4; 8	. 1
86	Window Corner Irons	No. 3, d	08. st's	. 1
**	Window Screens No. Door "No. Window Corner Irons Door " Door " Door Latches, # dozer Patent Window and D	d \$1.60	is 50&1	0 1
Porter's 1	Patent Window and D	oor Screen	n Fran	les:
	Corners	FER DOZ. In I White.	Im. Bl'	k
No. 20		\$0.75	\$3.25	×
No. 22		5.50	6.75	33
No. 30	Corners	9.00	11.00	dis
No. a. C	orners and Sticks com	splete for		
No. 1. Set	Corners— orners and Sticks cont window, \$\mathbb{q}\$ doz sets for Window, \$\mathbb{q}\$ doz sets	ets Brons	red,	
No. 11. "	" A doz	ets, Bronz	red,	
No. 4. "	" W dox	ets, Bron	zed 40	×
No. 16. "	or door	, doz s	ets,	8 33%
No. 4%. "	" or Door	, a doz se	ets,	₹
No. 2%. "	Door, & doz s	ets, Brons	ed,	
No. 3. "	doz s	ets, Bronz	ed,	
Boughton's	for Window, \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	oor Screen	s.dis a	5%
Window sc	reen frames (Stuart's)		.dis 25	*
American (Cast) Ironsee Pruning	al in	708c10	*
Tinners' Massachuse	tts	dis	dis se	18
Seymour's.	ttsrs Son, Nickle, 50&5 %;	dis	. 60&10	*
J. Wiss &	Son, Nickle, 50&5 %;	Japanned,	60810	*
Sliding Doo	r, M. W. & Co., List	di	s 45&2	*
Sliding Doo	er, M. W. & Co., List or, R. & E. listor, Patent Rolleror, Pt. Roller, Hatfield' er, Russell's Anti-Fricti	dis 60	&rocks	*
Sliding Doo	r, Pt. Roller, Hatneld r, Russell's Anti-Fricti	ondis 60	&10&2 &10&2	×
	Also see Hangers	ES.		
Ames, New	List, November 1 1855 s (Lowman's Patent) new list	didi	dis 20	*
Remington'	s (Lowman's Patent)		dis 30	8
Lippincott.	new list	*********	dis 25	3
31	LVER PLATED HOLLOW	WARE.		
Wm. Roger Meriden Bri	ttania Co		dis 50	*
90	LDERING IRONS AND	COPPERS.		
Covert's Sol Covert's Ad	dering Irons justable Coppers	********	dis 35.	
	district residence			
Tinned, Iron	n, Table and Tea Basting	****	dis 65	8
German Silv	erstons.	di	s 40&5	*
Hindostan P	lo. 1, 4c.; Axe, 5c		ne	10
Washita Sto	neNo.	i, % b.,	22C. nel	
Arkansas	No. 1, 4c.; Axe, 5c B., ne	1, 10.	b., net	
	SOUARRS			- 1
Iron	dis 60&10 %; full cases,	dis 70&10		П
Try Square	dis 60&10 %; full cases, dis 60&10 %; full cases, dadd \$2.50&\$4 and T Bevels y Sunara and T Revela	dis	goetto	
	TACKS, BRADS, &C.			
American Ir	on Carpet Tacks, all ki Tacks, all kinds Carpet Tacks, all kind Tacks Upholsterers' Tacks	nds 72	16810	4
Swedes Iron	Carpet Tacks, all kind	s 70,	5810	
Swedes Iron Swedes Iron	Upholsterers' Tacks	********	708:10 1	
Tinned Swed	les Iron Tacks	acks	708 10 5	6
American Ire	on Cut Tacks		708 10 5	5
Tinned Gim Copper Tack	p and Lace Tacks		000 10 1	
Copper Finis Cigar Box N	hing and Trunk Nails.		5&10 f	[]
Trunk and C	Upholsterers' Tacks. les Iron Tacks. les Iron Upholsterers' I no Cut Tacks ce Tacks p and Lace Tacks hing and Trunk Nails. ails ils. lout Nails. k and Clout Nails.		00% 10 9	
Tinned Trun Basket Nails	k and Clout Nails		00210	
Chair Nails. Zinc Glaciers	Points		58.10	
Common and Hungarian N	ails and Miners' Tacks		00210	
Tinned Capp Looking Glas	ed Trunk Nailss Tacks		5&10 g	
Picture Fram Leathered C:	Points Patent Brads alis and Miners' Tacks ed Trunk Nails s Tacks e Points urpet Tacks		5&10 g	
Brush Tacks	TAP BORERS.	4	58210 \$	1
	m.			. 2



5250 WILL BUY

MENGEL & CO.

chinery. Style Gordon Job Press at

OUR NEW SPECIMEN BOOK

JOHN G. MENGEL & CO.

EXCELSIOR PATENT

BAKING and ROASTING PAN.

This is the only seamless pan with a lap joint ever invented.

nvented.

It is sold generally by the jobbing trade.

The following are the names of some who carry hem in stock:

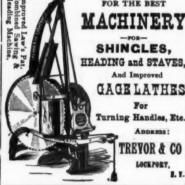
them in stock:

Hinderson & Stoutenborough, 270 & 272 Pearl st., New York City. Thos. Holt, 111 & 113 North Second st., Philadelphia, Pa. Chicago, Stamping Co., 10, 12 & 14 Lake st., Chicago, Ill. C G. Taylor & Co., 45 Sycamore st., Petersburg, Va. Trov Stamping Co., Troy, N. W. C. Cockson & Co., 6 Worship st., Lor'on, Eng. Wilson & Honges, Sherman, Texas. Walbridge & Co., 317 to 321 Washington st., Buffalo, N. Y. Harry Brothers, Dallas, Texas. Steple & Hanson, 73 Blackstone st., Boston, Mass. Butler & Hanson, 73 Blackstone st., Boston, Mass. Butler & Diehll, 53 & 55 East Genesee st., Syracuse, N. Y.

Address H. RICHEY, Sing Sing, M.T., U.S.A.



The Grinding is done so rapidly that they will pay for themselves every year over grindstones as a gift.



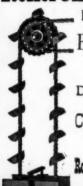
FOR THE BEST MACHINERY SHINGLES,

HEADING and STAVES, And Improved GAGE LATHES

For Turning Handles, Etc.

LOCKPORT,

RollerChainBelting



Detachable in every Link ELEVATORS,

Conveyers,

DRIVING BELTS.

FOR HANDLING Coal, Ores, Grain, CLAY, BRICK, &c.

Roller Chain Belting Co.

Also Manufacturers of the Legg Coal Mining Machines and Rotary Power Coal Drill Beef fr Illustrated Gatalega.

R. SWORMSTEDT & CO. Agents, Baltimore.

Tram Wheel



THE MOST PERPECTLY

Chilled and Automatic Self-Oiler

Willrun two shoulds with one filling of the reservoir. The economy in oil by using these wheels pays for them. For particulars and prices of Wheels, Axles and Mining Cars, address.

GEORGE PEACOCK,

Selma Ala.

	1	τ	1	e	×	k	£	o	3	r	1		3	8.	

TOR CALES.

TRAPS.

Lothrops' Brick and Plastering ...

Reed's Brick and Plastering ...

Disaton's Brick and Plastering ...

disclement & Maynard's ...

Worrall's Brick ...

Brades & Walby's ...

Garden ...

TRUCKS (WARRHOUSE, &C.)
Handy Truck. \$2.50 net
Penfield Block Co.'s list, 1882 dis 35 \$
Peerless, with Cogs, No. 3 5400
Eureka, No. 5 65 00
Eureka, No. 5 \$

WRENCHES.

MISCELLANEOUS.

Color Parer Core & Sicer &

Norwalk Machine Works,

Which, of Close Regulation,

Uniformity of Speed, Good Work-Marship and Material, ARE THE HEST MADE. Also,

Steam Engines

from 3 to 50 H. P.

Hoisting, Stone Sawing, Planing and Turning

MACHINERY.

Write for Prices. NORWALK, Ohlo-



Iss

Pull

MANUFACTURERS OF

GLOBE

STANDING SEAK" IRON ROOFING.

reelsior

V-Orimped

IRON ROOFING.

READY-ROLL

CAPPED ROOFING.



Corrugated Iron,

All Desired Gauges and

Painted,

Calamined,

Galvanized.

Send for our de-scriptive and illustrated catalogue.

PRICES and ESTIMATES promptly furnished.

CRIMPED & CORRUGATED

SIDING

CEILING SHINGLES W.G.HYNDMAN & CO.

CINCINNATI. O.



Agents Wanted

8 Q

ROOFING, SIDING, CEILING, &

IRUN ROOFING CO , NEW



CANTON IRON ROOFING CO., CANTON, OHIO,

ROOFING

Cheaper than Shin-gles. Fire and light-ning proof. Made



Corrugated Iron Roofing and Siding, Beaded Iron Ceiling and Siding, Crumped Edge Roofing and Siding, Roof Paint Roofer's Park d for Catalogue, Price List and Samples.



GARRY IRON ROOFING COMPANY

Largest manufacturerers o Iron Roofing in the world.

IRON ROOFING, inpet and Corregated Still Iron Tile or Shingle,



ON ORE PAINT AND CEMENT.

152-158 Merwin Stre CLEVELAND, O.

r Circular and Price



And VENTILATORS for Mills, Stores and Dwellings, anized Irou and Copper Cornices and ers. Metal Shingles. Sheet Metal Work uildings. Send for illustrated circular. E. VAN NOORDEN & OO. 383 Harrison Avenue, - BOSTON.

CORD STEAM BO CONN TOVAND INSUR

Issues Policies of Insurance after Careful Inspection of the Boilers, covering Loss or damage to property, and Loss of Life and Personal Injury

ARISING FROM STEAM BOILER EXPLOSIONS.

Full information concerning the plan of the Company's operations can be obt W. B. FRANKLIN, Vice-Prest. J. B. PIERCE, Secty. ALLEN, Prest.

BOARD OF DIRECTORS:

B. J. HENDER, President Eins. Fire Insurance Co.

GEN. W. B. FRANKLIN, Vice-President Out's Patent Fire Arms Annuacturing Co.

GEN. W. B. FRANKLIN, Vice-President Out's Patent Fire Arms Manuacturing Co.

SET OF ACRES OF A datans Express Co.

H. JALVIR, Pres't Colve Fire Arms Ing. Co.

H. JALVIR, Pres't Colve

LAWFORD & McKIM, Agents for Maryland, 22 Second St., Baltimore, Md.

THE OLDEST. THE LARGEST.

PORTER IRON ROOFING CO. CINCINNATI



Cambridge Roofing Company,

CROWL'S PATENT STANDING SEAM, Plain Rolled, Corrugated and Crimped Edge,

Roofing, Siding and Ceiling. Made of Steel and Charcoal Iron; award first medal by the New Orleans Exposition.

CAMBRIDGE, - --: OHIO.



Send for Circular and Price List, and mention this Paper.

Women's Mutual Insurance

OFFICERS AND
RLIZABETH B. PHELPS, Proc.
MARGARET HOLCOMBE, Plos-Proc.
EMILY TAYLOR,
Rlizabeth S. Roberts, H. Louise Gates,



and ACCIDENT COMPANY.

DIRECTORS: ELISABETH HARI CORNELIA KAMPI

ALFRED K. HILLS, N. D., 445 Fifth Avenue.

JOHN A. KAMPING, Altorney and Counsel, 18 Broadway, New York.

Incorporated under the Laws of New York.

onsists in its SAPETY AND SECURITY OF the association.

ITS SAPETY AND SECURITY

ON THE ECONOMICAL system, its IMPOSSI
FUND.

TO Inserve your and its SECURITY RESERVE

racts are plain, easily fulfilled and internal plain with forms and the Policy, \$100 to \$10,000.

2. Ordinary Acident Policy, \$5,000 death indensity; \$25 weekly.

3. Combined Life and Accident Policy.

4. \$500 Savings Bond.

BANK OF THE METROPOLIS, New York Chy, DEFOSTORY OF RESERVE FURD: PARMERS' LOAN AND TRUST CO., New York Chi The officers would be pleased to furnish any further tisulars which may be desired to relation to the Countries and the state of the countries of the countries and the country. Address all communications of the country. Address all communications to the country.

Solid Trains from Washington.

LEAVE WASHINGTON, B. & P. STATION:

11.20 A. M. Virginia Springs Express for Rockbridge, Alum, Warm, Hot, White Sulphur and other Springs Resorts of the Allephanics.

5.30 P. M. Louisville and Cincinnati Express. Pullman Cars and a Solid train to Louisville and Cincinnati, making all Western and Southwestern connections.

513 Pennsylvania Avenue,

JOHN MUIR, Genera Traffic Manager.

SHAFTING DEPARTMENT EDISON MACHINE WORKS.



SALESROOM:

19 DEY STREET, N. Y.

Shafting, Pulleys, Hangers, Couplings, &c.

Machine Molded Pulley Castings for Sale Low.

Roller Chain Belting Co., Columbus, O.

ELEVATORS, CONVEYERS,

DRIVING BELTS, for Handling



R. SWORMSTEDT & CO., Agents, Baltin



Sal April 18, 1871. Elevators.

JAMES BATES, Patentee, s. 1 3 & 5 President Street. BALTIMORE.

NOVELTY WORKS.

JAMES MURRAY & SON, chinists and Millwrights

rines and Boilers, Mills of all kinds, Marine ays, &c. Improved Clay Tempering Ma-ry, Steam or Horse Power. Phosphate inery, Crushers, Rollers, Mixers, &c., &c.

42 & 44 York Street, NEAR LIGHT, BALTIMORE.

Repairing of all kinds promptly done.



1 Solf-Extinguisher I R ONE CENT. 1 Street, New You Will not blow out! IS FOUR HOURS FOR 00

œ MOFTHE SOU FRENCH BUHR STONES.

STRAUB MACHINERY CO., Cincinnati, O.

\$250 SINCLE. \$350 DOUBLE.



portable

BOCKWOOD, NEWCOMB & CO. 180 to 190 S. Pennsylvania St., Indianapolis, Ind.

McShane & Bell & Foundry



Manufacture those celebra ted Bells for Tower Clocks, Court-Houses Cotton Mills, Facto-ries, &c. Prices and cata logues sent free. Address H. McSHANE & CO.

Baltimore, Md.



SHEPARD'S NEW \$60
SCHEW-GUTTING FOOT LATHE
Foot and Power Lathes,
Drill Presses, Scroll-saw Attachments, Chucks, Mandrels, Twist Drills, Dogs,
Calipers, etc.
Lathes on trial. Lathes on
nawment.

payment.
Address, fits for Amateurs or Artisans.
H. L. SHEPARD, Agent, 130 E. Second St., Cinn., O.

ESTABLISHED 1860.

KREHL, HAUSER & CO.

Leather Belting,

Girard, Trumbull Co., Ohio. SPECIALTIES—Harness, Black and Fair Brid-les, Line Leather, Saddle and Shoe Skirting, Russett and Stained Rein Welt, Fly-Net and Collar Leather. Superior Harness Backs, Pump Valve Leather. Write for prices. Mention this Paper.

BAY

FORTRESS MONROE, NORFOLK and the SOUTH.

The Bay Line comprises the New and Elegant Ste

"VIRGINIA," "CAROLINA" and "FLORIDA." VIRGINIA," "CAROLINA" and "FLORIDA."
All the Comforts as Luxuries of a First Class Hotel are afforded the Traveler. Spacious and Elegant Salcons and Staterooms, furnished with an especial view to comfort. Unsurpassed Cuisine, which is made a specialty with this Line. Elegant service and courteous attention. Steamers leave Haltimore daily except Sundays at 9.P.M. At Old Point Comfort is located the SPLENDID HYGEIA HOTEL, a Delightful Resort at all Seasons of the Year. For Tickets and Information, apply at Company's office,

157 W. BALTIMORE ST., BALTIMORE, Or on Board of Steamers. D. J. HILL, Superintendent. E. HEOWH, General Ticket Agent.

E. HARRINGTON, SON & CO.

N. 15 St. & Penna. Ave., Phila., Pa.



Sand for Rai

J. O. MAYNARD, 12 Cortlandt St., New York C. E. KIMBALL, 93 Oliver Street, Boston, Mass. W. BUCHNER, 202 Main St., Cincinnati, Ohio.

The Very Best in These injectors now take the lead over all others. Ħe Market

AMERICAN INJECTOR COMPANY Detroit, Mich., U.S.A.

WIRE RAILING

and Ornamental Wire Works. DUFUR & CO. 36 N. Howard St., Baltimore

Wire Railing for Cemeteries, Lawns, Gardens, Offices and Balconies; Window Guards, Tree Guards Wire Cloth, Sieves, Fenders, Cages, Sand and Coascreams. Iron Bedaissals. Chairs. &c

THE BRADSTREET

Under its present successful management for the past seven years.

And during that time its business as more than trebled, while its facilities have proportionately increased.

No expense is considered too great in obtaining and applying to the conduct of the business all possible improvements. With its present system for obtaining and promulgating information, this Agency is justly regarded by its patrons as authority on all matters affecting commercial credit. Its ramifications are greater and its business larger than any similar organization in the world conducted in one interest and under one management.

You are respectfully invited to investigate, and if in need of an Agency, to test its ability to serve you.

CHAS. F. CLARK, President Baltimore Office,—American Building, H. KERSHAW, Supt.

FOR SALE.
One 50-ton Zero Ice Machine at half-price.
Correspondence solicited.
R P. GERLACH, Bex 110, Cleveland, Ohio.

HUGH SISSON & SONS,

210 E. Baltimore St., bet. North & Calvert Sts., BALTIMORE.

Tombs, Altars, Counters Furniture Slabs, Mantels, Tiles. Estimates and Drawings Free.

& MAULE, PANCOAST

CATALOGUE AND PRICE-LIST. solicited from parties r South Third POR 245

Mention this Paper when you Add

TAPER-SLEEVE PULLEY WORKS.

ERIE, PA

CHENEY & HEWLETT, Architectural Iron Works.

Wrought and Cast Iron Work
for Building Purposes
N. CHEWEY.
C. HEWLETT. N. CHENEY. OFFICE:

201 BROADWAY, NEW YORK. Book giving strength of wrought-iron girders, same and cast-iron columns mailed on application.

PORTLAND CEMENT.

German and English Brands of Best Quality.

nd for tests and all particulars to ERSKINE W. FISHER

WHILES STILLIONS, No. 15 Sendway, . . MEW TOSE.

Charlotte.

BUILDERS OF

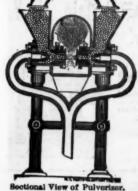
ENGINES and BOILERS, STAMP MILLS. CRUSHERS, Circular Saw and Grist Mills.

CORNISH PUMPS.

MINING IACHINERY.

Cotton Presses, Water Wheels, Shafting and General Machinery.

JOHN WILKES, Manager.



PNEUMATIC PULVERIZER.

TWO POWERFUL OPPOSING CURRENTS

of the super-heated steam currents employed, through which energy minute part to become very hot and dry, which produces a beneficial effect upon Sulphur The light weight and simplicity of construction of the Pulveriner, the extre parts are the WONDER and SURPRISE of all who sciences its operation. raish complete plants for pulverising

10 to 200 Tone Per Day,

sam Boller supplying all the power required.

PNEUMATIC PULVERIZER COMPANY.

2 and 4 Stone Street, New York.

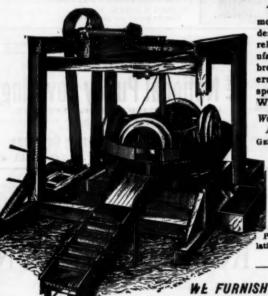
WRITE FOR PARTICULARS.



ARCTIC ICE MACHINE MFG. CO

WISWELL

COMBINED.



The following testionial from Mr. Marsden, of the firm of Farrei & Maraden, manufacturers of stone-breakers & ore-crushers, Ansonia, Conn., speaks volumes for the Viswell Mill:

Winnell Electric Mining Machinery Co.: GENTLEMEN: After care

fully inspecting your mill and seeing it in operation, I do not hesi-tate to say that it is on a of the best, if not the best pulveriser and most

your success.

WE FURNISH

A Complete Mill for \$2,500.

DELIVERED ON BOARD CARS.

For further information address

WISWELL

Electric Mining Machinery Company

A. A. REEVE, Treas,

4 Post-Office Square, Boston, Mass.

FROM 1-4 to 15,000 lbs. WEIGHT.

True to pattern, sound, solid, free from blow-holes, and unequaled strength. unequaled strength.
tronger and more durable than iron forgings in any
sition or for any service whatever.
0,000 CRANK SHAFTS and 8,000 GRAR WHEBLS of
steel now running prove this.
BANK SHAFTS and GEARING specialties.
STEEL CASTINGS of every description

Send for Circulars and Pr

+CHESTER STEEL CASTINGS CO.+-

Office, 407 Library Street, Philadelphia.

Works, Chester Pa

M. C. BULLOCK MFG. CO.



FOR MINUS, BLAST FURNACES, DOCKS, ETC.

STRAIGHT LINE ENGINES.

GREEBAL OFFICE:

m 64., Phoniz Building. Lake and Tally CHICAGO, U. B. A.

A LONG FELT WANT SUPPLIED

For DITCHING, EXCAVATING

Loading Wagons

50 TO 100 PER CENT, SAVED IN LABOR.



Address VULCAN IRON WORKS, Toledo, Ohio,

Winding Engines, Furnace Hoists, Mine Hoists.

Mining Plants," Concentrating Works, and Dredging Machinery Furnished Complete.

COPELAND & BACON 85 Liberty Street, New York.

309 Arch Street, Philada.



BROWN & KING, MANUFACTURERS COTTON MILL SPECIALTIES.

Roller Covering, Loom Pickers and Strapping.

Dealers in Roller Coverers, Stock and Tools; Cotton and Woolen Mill Supplies.

Full Line "Hick's" United States Standard Ring Travelers, Mill Wire Goods
Spring Cotters, Belt Hooks, Lacing, &c., kept constantly on hand.
Wrought Iron Pipe Fittings and Brass Goods. Southern Agents for the celebrated
"B. C. & D. Oak Tanned Patent Lap Belting, Galvin Compound Wedge Gate Valve,
Imhauser's Watchman Time Detectors, Diamond Emery Wheel Machine Co., &c.

Office and Salesroom No. 62 S. Broad Street. ATLANTA. GA.

DETROIT, MICH.,

Galvanized, Iron and Steel,

Galvanized Poultry Netting.





* FIRE BRICK, *

Standard Sewer Pipe AND CULVERT PIPE.

Double Strength, with Improved Sockets. GHATTANOOGA, TENN.

IINYULCANIZED PACKING



. Called the Standard, *

AS It IS THE PACKING BY WHICH ALL OTHERS ARE COMPARED

Accept no packing as JENKINS' PACKING as stamped with our "Trade Mark."

JENKINS BROS.

69 John St., N. Y. 105 Milk St., Boston. 13 S. Fourth St., Phila.



TIVES SATISFACTION WHEREVER USED OFFICE 22 CENTRAL ST. BOSTON. MASS

THE IMPROVED FLORIDA

3500 in ACTUAL USE, all giving the best satisfaction. Estimates furnished on an

PIERCE, BUTLER & PIERCE MFG. CO., DLE MANUFACTURERS. SYRACUSE, N.Y. NERAL (GEO. R. COBB. DT WIlliam St., New York, N.Y. NERAL (GRANE HOS. MFG. CO., Chicago, III. GENERAL (GEO. B. COBB. ST WIlliam R
GENERAL (GEO. B. COBB. ST WIlliam R
GRANE BROS. MFG. CO.
JAS. B. ROBERTSON & CO
AGENCIES (N. O. NELSON MFG. CO., 88
TABER & 60%, Chicago,
JAMES P. WOOD & CO.

THE STEWART HEATER CO., Buffalo, N. Y.

Nos. 19 and 21 CLINTON ST.

Do You Want

to Economize?

The Stewart Heater is the only Feed Water Heater made which prevents scale in brilers and saves aper cent of fuel bill. Send for descriptive catalogue and price-list of

Heaters, Boiler Feed Pumps, Flue Cleaners, etc.

nd with us before purchasin





THE DUNNING

Patent Wrought-Iron Boiler,

LOW PRESSURE STEAM HEATING

And Insures a Warm House Day and Night.

Over 13,000 in use! Keeps Steam up Constantly.

Also, Engines & Boilers and & Machinery generally

New York Central Iron Works, 77 Exchange St., Geneva, N.Y. Send for Illus. Catalogue with full description and price-list.

AGENTS WANTED. N. B.—Correspondence solicited from Architects and persons building.



POWER!

Prevent your Belts from Slipping by using

National Pulley Covering. EABILY APPLIED, CHEAP, EFFECTIVE. tivets; can be put on by any one. Satisfaction Guaranteed. Send for Circulars with Frices.

The National Pulley Covering Company, BOWLY'S WHARF and WOOD ST., . . BALTIMORE, MD

OILS for WOOLEN MILLS a Specialty.

C. ROBINSON



217 (Old No. 81) South Street,

BALTIMORE.

ELAIN OIL. Always satisfactory. Will soour out perfectly in any water.

OVEJA OIL. The best Mineral Wool Oil made. Gives satisfaction to our satisfaction to our

LANA OIL. A very good oil, but does not acour out as well as filain in very hard water.

WE ALSO CARRY IN STOCK:

B, W. SPERM OIL. W. SPERM OIL PRIME LARD OIL

COLOPHINE CYLINDER, COLOPHINE ENGINE, COLOPHINE SPINDLE,

PARAFFINE LUBRICATING,

AND ALL OTHER KINDS OF OIL

undence Solicited and Samples Forwarded, if desired.

is th

subse

Send

SPI

-DAVID BOYLE -

521 W. MONROE STREET, · · CHICAGO, ILL.

PATENTEE AND BUILDER OF THE

BOYLE

AND REFRIGERATING

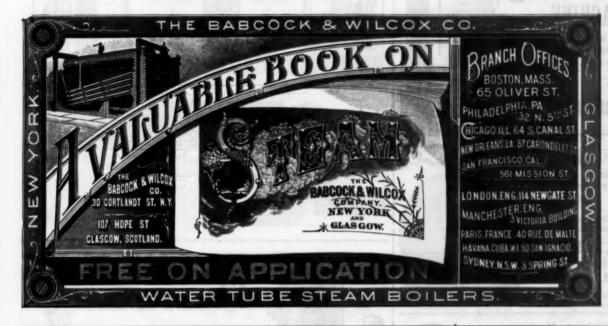
The Most Simple, Reliable, Durable and Economical in Existence.

WHAT PEOPLE SAY.

"I consider it the greatest improvement that has ever been made in breweries."—FRED. PABST, President Ph. Best. Brewing Co. "We are thoroughly satisfied with your machine, and we believe it is superior to any other in the market to-day."—HENRY G. KÜHRT, President Atlanta City Brewing Co., Atlanta, Ga.

Estimates for Ice or Refrigerating Machines furnished on application.

Refer to over 125 Machines in successful operation.



BABCOCK & WILCOX *BOILERS*

-THE-

Pennsylvania Steel Co., Baltimore, Md., 3
Gosport Navy Yard, Norfolk, Ya...
Newberry Cotton Mills, Newberry, S.C.,
Ponce de Leon Hotel, St. Augustine, Fla.
Gadsden Furnace Co., Gadsden, Ala.
Tennessee Coal, Iron & Railroad Co.,
South Pittsburgh, Tenn...
Senate Wing, U. S. Capitol, Washington, D. C...
Wise Brothers, Baltimore, Md...
Alabama & Tennesse Coal and Iron Co.,
Sheffield, Ala...
Hannis Distilling Co., Baltimore, Md...

Shemeid, Ala.

Hannis Distilling Co., Baltimore, Md.,

F. & H. Fries, Salem, N. C.

Juo. Crossley & Sons, Southwood Plan

Jno. Crossley & Sons, Sonna-tation, La. Louisiana Sugar Refising Co., New Or

Made of Steel, Double Bolted, Double Collared and Extra Strong Couplings. SPECIALLY ADAPTED TO USE IN HANDLING COTTON SEED AND ALL ITS PRODUCTS, FERTILIZERS AND PHOSPHATES.



Dealer in Mill and Grain Elevator Supplies.

Can Ship from Pittsburgh or Chicago.



ELL

131 and 133 West Washington Street,

ACHINE

Sprocket Wheels, Traction Wheels, Shafting, Pulleys, Buckets.

39 South Holliday Street, Baltimore, Md. 193 and 195 N. 5th St., Philadelphia, Pa.

LINK-BELT MACHINERY CO.,



THE MANUFACTURERS' RECO

is the most thorough, complete and authentic source of information on Southern industrial affairs in existence. The subscription price is only \$3.00 a year. Some of our subscribers think every issue is worth that much. Try it for a year. Send in your subscription to-day. Don't wait until to-morrow; you may forget it.

Brick Makers' Supplies.

An easy-working, quick-operating and powerful press. Will successfully press brick made on any Brick or Tile Machine.

The Wrought-Iron Tempering Wheel, The most thorough mud temperer known. Tempers faster, mixes better and runs lighter than any wheel

Barrows, Trucks, Molds, Kiln Doors, &c.

C. W. RAYMOND & CO.

DAYTON, O. Mention Manufacturers' Record.

The Spiral Pug Mill

QUAKER BRICK MACHINE.

eity 40,000 Perfect Brick Per Day Great Saving in Labor and Expens

raish complete Brick yard outfits,—Engine ded complete. Write for our handsomely containing valuable information. Estimate adence solicited. Address

ETCHER & THOMAS, Indianapolis, Ind



VALKER MANFG. CO



Shafting, Hangers, Pulleys.

GEARING A SPECIALTY.

Cleveland, - Ohio.

Estimates furnished. Write for Gear and Price-Lists A.



Lightning Well Sinking Machinery.
The Largest Manufacturers of Well Sinking
and Prospecting Tools.

have sunk 550 feet in 10 hours with the revolving p cess, 160 feet in 40 minutes by the jetting process, a 156 feet in 10 hours without removing the tools fr the well by the harmanic process. We man accorded tools in an interest of the control of

The American Well Works,

AUBOBA, ILL., U.



AKESLE MNFG. CO.

Du Quoin, ILL.

SEND FOR CATALOGUE.



MACHINERY!

MACHINERY!

OVER 6,000 MACHINES DESCRIBED NEW AND REBUILT, RATES (FREIGH OBTAIN)

s variety, fully described, with prices annexed, in our catalogues as below specified.

Catalogue No. 44.—Machine Shop and Blacksmith Equipment. 80 pages, each 14 in. x 11 in. Catalogue No. 4.—Engines, Boilers, Pumps and Steam Fittings. 72 pages, each 14 in. x 11 in. Catalogue No. 46.—Wood Working and Grist Mill Machinery, Water Wheels and Mill Supplies. 126 pages, each 14 in. x 11 in. atalogue No. 46.—Wood Working and Orist Mill Machinery, Nature 136 pages, each 14 in. x 1x in.
and us stamps for catalogue, stating exactly what class of machinery you require, and in what
on saw the advertisement.

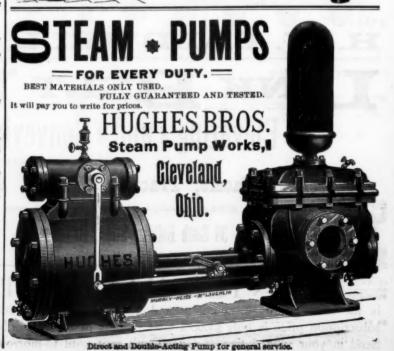
W. E. DREW, Agent,

S. C. FORSAITH MACHINE CO, Machinery Dealers, Manchester, N. H.

Castings of every

JNO. N. MAROUETTE, 118 W. Falls Ave., { BALTIMORE, MD.

OOK THROUGH the advertising pages carefully. They contain the announcements of the largest and most reliable houses in the country manufacturing and dealing in machinery of all kinds, mill, factory, mine and railroad supplies, hardware, roofing, builders' material, etc. If in need of anything herein advertised, write to the advertisers for catalogues, prices, &c.

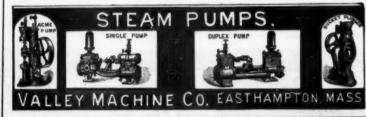




THIS IS PUT HERE!
THE STATE OF THE PULSOMETER,

Interference of the property o

Plantations, Irrigating or Hydraulic Mining.
or write for our new se page Illustrated Descriptive Book containing Full Far
Net Prices, and hundreds of A-1 Testimonials. Mailed Free.
Pulsometer Steam Pump Co., 83 John Street, N. Y.





THE VOLKER & FELTHOUSEN MFG. CO. BUFFALO DUPLEX STEAM PUMPS.

KNOWLES STEAM PUMP WORKS,

Single and Duplex Steam and Power Pumping Machinery

113 FEDERAL ST.

BOSTON.

93 LIBERTY ST. NEW YORK.



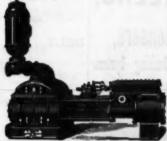
SEND FOR

ILLUSTRATED

ATALOGUE.

Price-Lists.

Philadelphia







FURNISHED

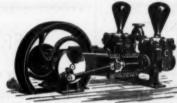
APPLICATION

CORRESPONDENCE

BOLICITED.









SOUTHERN SELLING AGENTS

CROOK, HORNER & CO.

SHAW & DAVIN Birmingham, Ala.

MECKLENBURG IRON WORKS

Charlotte, N. C. VALE & MURDOCH

Charleston, S. C.

E. V. WHITE & CO. Norfolk, Va.

Boston

Worthington

SEND FOR ILLUSTRATED CATALOGUE

HENRY R. WORTHINGTON

NEW YORK

Chicago

SOUTHERN SELLING AGENTS

M. SCHWARTE

New Orleans, La.

ATLANTA ENGINEERING CO. Atlanta, Ga.

CHY MACRINERY Louisville, Ky.

W. H. PERRY

Nashville, Tenn.

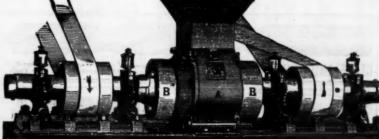
ERMORE POUNDRY & MACH. CO.

Memphis, Tenn. San Francisco



MANUFACTURERS RECORD Co., F

STURTEVANT ROCK CRUSHER



COres, Phosphates, and Other Hard Substances.

STURTEVANT MILL CO., 89 MASON BUILDING, BOSTON, MASS.



Gin & Machine Co.

MEMPHIS, TENN., U. S. A.

ENGINES, BOILERS,

Cotton Gins, Gin Feeders and Condensers, And the Celebrated "MILBURN" Wood Split Pulley, with Bushing System.

The best and lightest Pulley made. Every one guaranteed. Send for catalogue, testimonials and price-lists. We have the largest works of the kind in the world. Will send one of our Wood Split Pulleys





to any responsible party, for thirty days' trial, free of charge, if it fails to meet our warranty.

Milburn Gin & Machine Co.

E. C. ATKINS & CO.

Circular, Cross-Cut & Band Saws.

HAVE YOU A BAND MILL Or Are You Going to Erect One?

OUR BAND SAWS

Are winning the favor of Lumber Manufacturers for their excellent and uniform temper and for the quality of Steel
we use in their manufacture.

WRITE FOR PRICES

SPECIAL STEELAND TEMPER

Use only the best Cross-Cuts. Our Cross-Cuts are acknowledged as incomparably the best in use We are agents for Tanite Emery Wheels and Grinding Machinery.



Stokes & Parrish Machine Co.

PASSENGER

FREIGHT.

HYDRAULIC.

STEAM

AND

POWER.



HOISTING MACHINERY FOR

MINES.

RLAST

FURNACES,

INCLINED

PLANES, AND

DOCK USE.

SAFETY, SPEED AND ECONOMY.

WORKS AND OFFICE: 30th and Chestnut Sts.,

PHILADELPHIA.

BRANCH OFFICE:

95 & 97 Liberty Street, NEW YORK.

udlow Valve Manfg. Co.

938 to 954 River Street, and 67 to 83 Vail Avenue,





lso Fire Hydrants, Yard and Wash Hydrants, Check and Foot Valves

MORTON, REED & CO. BALTIMORE, MD.



CLEVELAND TWIST DRILL CO.

